

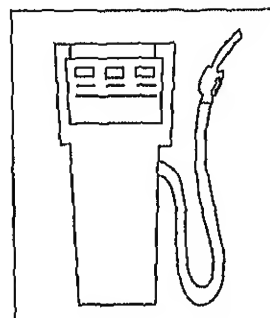
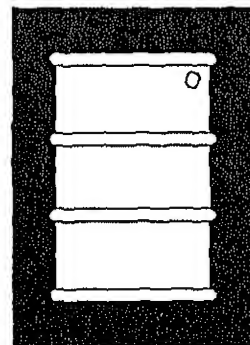
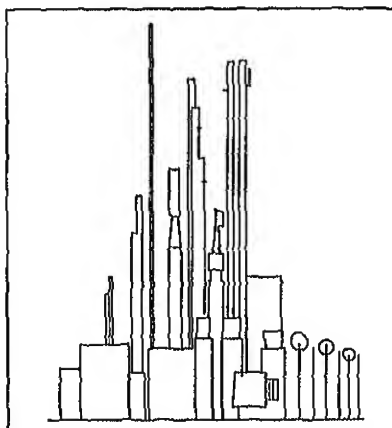
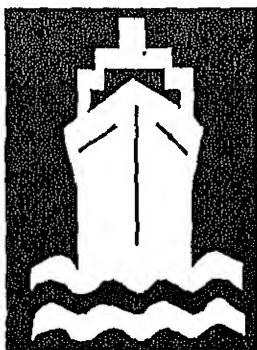
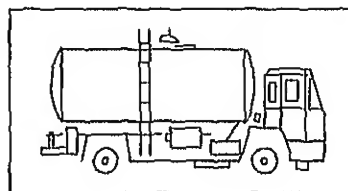
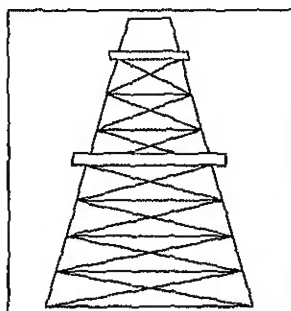
Data for Week Ended:  
November 10, 1989

# Weekly Petroleum Status Report

Includes Short-Term Energy  
Outlook, October 1989  
(See Page 2)

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# Preface

The *Weekly Petroleum Status Report* (WPSR) provides timely information on the petroleum supply situation in the context of historical information, selected prices, and forecasts. The WPSR is intended to provide up-to-date information to the industry, the press, planners, policymakers, consumers, analysts, and State and local governments. It is published each Thursday by the Energy Information Administration (EIA) and excerpts of the data are available electronically after 5:00 p.m. Wednesday. The data contained in this report are based on company submissions for the week ending 7 a.m. the preceding Friday. For some weeks which include holidays, publication of the WPSR is delayed by 1 day. The WPSR is not published during 1 of the last 2 weeks of the year depending upon which day of the week Christmas occurs. The following week's issue includes data for both weeks.

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# Highlights

## Refinery Activity (Million Barrels per Day)

	Four Weeks Ending		
	11/10/89	11/03/89	11/10/88
Crude Oil Input to Refineries .....	13.2	13.3	13.1
Refinery Capacity Utilization (Percent) ..	85.5	86.2	83.6
Motor Gasoline Production .....	6.7	6.8	6.9
Distillate Fuel Oil Production .....	2.9	2.9	2.9

Refinery capacity utilization averaged 85.5 percent during the 4 weeks ending November 10, 1989, about 2 percent above the rate for the same period last year.

## Stocks (Million Barrels)

	Week Ending		
	11/10/89	11/03/89	11/10/88
Crude Oil (Excluding SPR) .....	348.2	340.6	338.8
Motor Gasoline .....	219.0	221.2	218.8
Distillate Fuel Oil .....	122.2	119.2	128.4
All Other Oils .....	406.9	407.8	392.1
Crude Oil In SPR .....	578.7	578.3	556.8
Total	1,675.0	1,667.1	1,634.9

On November 10, 1989, distillate fuel oil stocks stood at 122.2 million barrels, about 5 percent below the level 1 year ago. Although this level is below the average range for the past 3 years, it is well above the minimum operating inventory level. Crude oil stocks increased by 7.6 million barrels during the week. They are about 3 percent above the level 1 year ago.

## Net Imports (Million Barrels per Day)

	Four Weeks Ending		
	11/10/89	11/03/89	11/10/88
Crude Oil .....	6.1	6.2	5.2
Petroleum Products .....	1.2	1.2	1.9
Total	7.3	7.4	7.1

Year to date net imports this year are about 9 percent above the average for the same period last year.

## Products Supplied (Million Barrels per Day)

	Four Weeks Ending		
	11/10/89	11/03/89	11/10/88
Motor Gasoline .....	7.3	7.2	7.3
Distillate Fuel Oil .....	3.0	3.1	3.2
All Other Products .....	6.2	6.4	7.1
Total	16.5	16.7	17.6

Distillate fuel oil product supplied during the 4-week period ending November 10, 1989, averaged 3.0 million barrels per day, about 8 percent below the rate supplied a year ago.

## Prices (Dollars per Barrel)

	Week Ending		
	11/10/89	11/03/89	11/11/88
<b>World Prices</b>			
World Crude Oil .....	17.39	17.31	11.24
<b>Spot Market Product Prices<sup>1</sup></b>			
<b>Rotterdam Market</b>			
98 Octane Gasoline (Leaded) .....	21.86	21.92	21.16
Gas Oil .....	24.80	25.13	16.82
Residual Fuel Oil .....	16.52	16.82	12.39
<b>New York Market</b>			
87 Octane Unleaded Reg Gasoline ....	21.63	21.67	23.84
No. 2 Heating Oil .....	24.51	24.95	18.48
Residual Fuel Oil .....	17.75	17.50	14.00

The weighted average international price of crude oil as of November 10, 1989, is estimated to be \$17.39 per barrel, an increase of 8 cents from the previous week.

<sup>1</sup>Source: Petroleum Publications, Inc. (Copyright 1989)

Beginning with this issue of the *Weekly Petroleum Status Report*, weather data in Table 15 have been changed to reflect heating degree -days.

## Highlights from the *Short-Term Energy Outlook*, October 1989

Relatively weak but positive growth in domestic petroleum demand is expected for 1990, after what could be the first annual decline in oil demand since 1983. The year 1989 is now expected to end with a 0.2 percent decline in oil demand, with 0.9 percent growth expected next year. Stable oil prices, a slowing economy, and greater availability of nuclear and hydroelectric power sources all play significant roles in this outlook. On the supply side, domestic oil production is expected to continue to decline significantly. Crude oil production is expected to fall nearly 4 percent next year, after a decline of about 6 percent this year.

Imported crude oil prices eased from the April peak of \$19.59 per barrel to near \$18 by mid-summer. Presently, oil prices are expected to remain at \$17.50 per barrel. Recent developments now suggest that OPEC may have to restrain crude oil production by more than 1.0 million barrels per day between the fourth quarter of this year and early 1990 to maintain oil prices at \$17.50 throughout the forecast period.

A 70,000-barrel-per-day slide in residual fuel demand and low heating fuel demand for all of 1989 are expected to contribute to a 30,000-barrel-per-day net decline in domestic oil use from 1988 to 1989.

Sharply higher heating oil demand expected for the first quarter of 1990 (expected if weather is normal) will contrast with last year's depressed levels. Otherwise, overall distillate growth next year should be minimal.

Domestic crude oil production is projected to continue to decline in the Lower-48 States. A concurrent decline in Alaskan production was already evident by early summer. In 1989, total U.S. production is expected to decline by 470,000 barrels per day from a year earlier—a 5.8 percent drop. In 1990, total oil production is projected to drop by an additional 300,000 barrels per day, as Lower-48 and Alaskan supplies continue to decline. This assumes that new production coming on-line from offshore California (Point Arguello) will not begin until the second quarter of 1990.

U.S. net imports of crude oil (including the Strategic Petroleum Reserve) and petroleum products are expected to average 7.2 million barrels per day in 1989, with an expected increase of 600,000 barrels per day over 1988 levels. This reflects the impact of reduced domestic production and additions to petroleum stocks following a drawdown in 1988.

## History and Base Case Projections, U.S. Total, *Short-Term Energy Outlook*, October 1989

	History					Projections					Year		
	1988		1989			1990					1988	1989	1990
	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr			
Assumptions													
Average Cost of Imported Crude Oil	14.36	13.21	16.76	18.97	17.60	(Nominal Dollars per Barrel)					14.64	17.70	17.50
Real Gross National Product	4,043	4,069	4,107	4,134	4,152	(Billion 1982 Dollars)					4,024	4,139	4,214
Forecasts													
Petroleum Prices (Retail)						(Nominal Dollars per Gallon)							
Motor Gasoline	.99	.97	.96	1.13	1.11	1.06	1.08	1.11	1.13	1.05	.96	1.06	1.09
Distillate Fuel Oil	.75	.78	.86	.86	.83	.88	.91	.87	.84	.89	.81	.86	.88
Crude Oil Production	8.01	8.00	7.78	7.74	7.57	(Million Barrels per Day)					8.14	7.67	7.37
Petroleum Products Supplied													
Motor Gasoline	7.48	7.33	7.08	7.46	7.47	7.36	7.05	7.59	7.58	7.41	7.34	7.34	7.41
Jet Fuel	1.42	1.49	1.50	1.40	1.49	1.53	1.53	1.43	1.50	1.53	1.45	1.48	1.50
Distillate Fuel Oil	2.78	3.32	3.38	2.98	2.83	3.30	3.56	2.96	2.81	3.35	3.12	3.12	3.17
Residual Fuel Oil	1.26	1.53	1.60	1.24	1.12	1.28	1.39	1.03	1.10	1.24	1.38	1.31	1.19
Other Petroleum Products <sup>1</sup>	4.15	4.18	4.06	3.75	3.97	4.22	4.15	3.84	4.29	4.29	4.00	4.00	4.14
Total Products Supplied	17.08	17.86	17.62	16.81	16.89	17.69	17.69	16.84	17.29	17.82	17.28	17.25	17.41
Total Net Imports <sup>2</sup>	6.62	6.94	6.95	7.01	7.50	7.31	7.24	7.31	7.98	7.89	6.59	7.19	7.61

<sup>1</sup> Includes liquefied petroleum gases, petrochemical feedstocks, and all other products not noted here.

<sup>2</sup> Includes imports for the Strategic Petroleum Reserve.

**Table 1. U.S. Petroleum Balance Sheet**

Petroleum Supply (Thousand Barrels per Day)	Four Week Averages Ending		Percent Change	Cumulative Daily Averages 313 Days		Percent Change
	11/10/89	11/10/88		1989	1988	
<b>Crude Oil Supply</b>						
(1) Domestic Production <sup>1</sup> .....	E7,630	8,023	-4.9	E7,688	8,164	-5.8
(2) Net Imports (Including SPR) <sup>2</sup> .....	6,133	5,236	17.1	5,710	4,939	15.6
(3) Gross Imports (Excluding SPR) .....	6,228	5,339	16.7	5,802	5,046	15.0
(4) SPR Imports .....	44	58	--	61	51	--
(5) Exports .....	E139	160	-13.4	E153	158	-2.9
(6) SPR Stocks Withdrawn (+) or Added (-) .....	-44	-58	--	-61	-51	--
(7) Other Stocks Withdrawn (+) or Added (-) .....	-140	-216	--	-62	32	--
(8) Product Supplied and Losses .....	E-18	-43	--	E-27	-40	--
(9) Unaccounted-for Crude Oil <sup>3</sup> .....	-348	193	--	163	194	--
(10) Crude Oil Input to Refineries .....	13,214	13,136	0.6	13,410	13,239	1.3
<b>Other Supply</b>						
(11) Natural Gas Liquids Production .....	E1,516	1,663	-8.8	E1,579	1,621	-2.6
(12) Other Hydrocarbons and Alcohol New Supply .....	E63	56	12.5	E57	52	10.2
(13) Crude Oil Product Supplied .....	E18	43	-59.0	E27	40	-31.4
(14) Processing Gain .....	E651	648	0.5	E646	650	-0.6
(15) Net Product Imports <sup>4</sup> .....	1,169	1,829	-36.1	1,456	1,607	-9.4
(16) Gross Product Imports <sup>4</sup> .....	1,951	2,396	-18.6	2,164	2,252	-3.9
(17) Product Exports <sup>4</sup> .....	E782	567	37.8	E708	645	9.7
(18) Product Stocks Withdrawn (+) or Added (-) <sup>5</sup> .....	-91	219	--	-164	-55	--
(19) Total Product Supplied for Domestic Use .....	16,539	17,593	-6.0	17,011	17,154	-0.8
<b>Products Supplied</b>						
(20) Motor Gasoline .....	7,318	7,306	0.2	7,312	7,333	-0.3
(21) Naphtha-Type Jet Fuel .....	232	215	7.8	210	211	-0.2
(22) Kerosene-Type Jet Fuel .....	1,317	1,269	4.6	1,284	1,229	2.8
(23) Distillate Fuel Oil .....	2,960	3,207	-7.7	3,066	3,074	-0.3
(24) Residual Fuel Oil .....	1,126	1,395	-19.3	1,290	1,332	-3.2
(25) Other Oils <sup>6</sup> .....	3,586	4,211	-14.9	3,869	3,975	-2.7
(26) Total Products Supplied .....	16,539	17,593	-6.0	17,011	17,154	-0.8
<b>Total Net Imports</b> .....	7,302	7,066	3.4	7,166	6,546	9.5
<b>Petroleum Stocks</b>						
(Million Barrels)	11/10/89	11/03/89	11/10/88	Percent Change from Previous Week      Year Ago		
Crude Oil (Excluding SPR) <sup>7</sup> .....	348.2	340.6	338.8	2.2	2.8	
Total Motor Gasoline .....	219.0	221.2	218.8	-1.0	0.1	
Finished Leaded .....	19.0	19.5	38.5	-2.4	-50.7	
Finished Unleaded .....	160.9	164.0	142.9	-1.9	12.6	
Blending Components .....	39.1	37.7	37.3	3.6	4.6	
Naphtha-Type Jet Fuel .....	6.3	5.0	5.4	2.5	1.4	
Kerosene-Type Jet Fuel .....	44.0					
Distillate Fuel Oil .....	122.2					
Residual Fuel Oil .....	49.6					
Unfinished Oils .....	111.3					
Other Oils <sup>8</sup> .....	E195.9					
<b>Total Stocks (Excluding SPR)</b> .....	1,096.3					
<b>Crude Oil in SPR</b> .....	578.7					
<b>Total Stocks (Including SPR)</b> .....	1,675.0					

<sup>1</sup> Includes lease condensate.

<sup>2</sup> Net Imports = Gross Imports (line 3) + Strategic Petroleum Reserve (SPR) Imports.

<sup>3</sup> Unaccounted-for Crude Oil is a balancing item. See Glossary for further explanation.

<sup>4</sup> Includes finished petroleum products, unfinished oils, gasoline blending components.

<sup>5</sup> Includes an estimate of minor product stock change based on monthly data.

<sup>6</sup> Includes crude oil product supplied, natural gas liquids, liquefied refinery gases, gasoline, jet fuels, and distillate and residual fuel oils.

<sup>7</sup> Includes crude oil in transit to refineries.

<sup>8</sup> Included are stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids, and other oils for petrochemical feedstock use, special blending components, naphtha and other oils for petrochemical feedstock use, special blending components, naphtha and other oils for petrochemical feedstock use, special blending components.

For the current 2 weeks, stocks of these minor products are estimated from monthly data.

E=Estimate based on data published for the most recent month in the *Petroleum Statistics* report.

Note: Due to independent rounding, individual product detail may not add to totals.

Sources: See page 25.

**Table 2. Refinery Activity**  
(Million Barrels per Day)

Inputs and Utilization												
Year/Element	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Crude Oil Input	12.6	12.3	12.1	12.5	12.7	13.2	13.4	13.4	13.2	12.7	13.0	13.2
Gross Inputs	12.7	12.4	12.2	12.6	12.9	13.3	13.6	13.5	13.3	12.9	13.1	13.4
Operable Capacity	15.6	15.5	15.6	15.4	15.6	15.9	15.7	15.6	15.6	15.6	15.9	15.9
Percent Utilization <sup>1</sup>	81.9	79.9	78.5	81.2	82.5	85.4	85.7	85.7	85.5	82.7	82.3	83.9
<b>1988</b>												
Crude Oil Input	12.9	12.8	13.0	13.1	13.4	13.5	13.6	13.8	13.8	13.1	13.2	13.4
Gross Inputs	13.2	12.9	13.2	13.3	13.6	13.7	13.8	14.0	13.4	13.3	13.4	13.6
Operable Capacity	15.9	15.9	15.9	15.9	15.9	15.9	16.0	16.0	16.2	16.0	15.9	15.9
Percent Utilization <sup>1</sup>	82.8	80.9	83.3	84.0	86.7	86.0	86.5	87.4	83.7	83.4	83.9	86.1
<b>1989</b>												
Crude Oil Input	13.3	12.8	13.0	13.0	13.4	13.9	13.8	13.9				
Gross Inputs	13.5	13.0	13.2	13.1	13.6	14.1	14.0	14.0				
Operable Capacity	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7				
Percent Utilization <sup>1</sup>	86.1	82.9	84.0	83.8	86.5	89.6	89.0	89.4				
Average for Four-Week Period Ending:												
<b>1989</b>	<b>09/01</b>	<b>09/08</b>	<b>09/15</b>	<b>09/22</b>	<b>09/29</b>	<b>10/06</b>	<b>10/13</b>	<b>10/20</b>	<b>10/27</b>	<b>11/03</b>	<b>11/10</b>	
Crude Oil Input	13.9	14.0	14.0	13.9	13.8	13.7	13.6	13.4	13.4	13.3	13.2	
Gross Inputs	14.1	14.2	14.2	14.1	14.0	13.9	13.8	13.7	13.6	13.5	13.4	
Operable Capacity	E15.7	E15.7	E15.7	E15.7	E15.7	E15.7	E15.7	E15.7	E15.7	E15.7	E15.7	
Percent Utilization <sup>1</sup>	90.1	90.7	90.6	90.1	89.4	88.4	87.9	87.1	86.6	86.2	85.5	
Production by Product												
Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Finished Motor Gasoline	6.7	6.4	6.5	6.8	7.0	7.1	7.0	6.9	6.9	6.7	6.9	7.0
Leaded	1.8	1.7	1.6	1.7	1.9	1.8	1.7	1.6	1.7	1.5	1.6	1.5
Unleaded	4.9	4.7	4.9	5.1	5.2	5.3	5.3	5.3	5.3	5.1	5.4	5.5
Jet Fuel	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4
Distillate Fuel Oil	2.8	2.6	2.4	2.6	2.6	2.7	2.7	2.7	2.7	2.6	3.0	3.2
Residual Fuel Oil	0.9	0.8	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0
<b>1988</b>												
Finished Motor Gasoline	6.7	6.7	6.7	6.9	6.9	7.0	7.2	7.2	6.9	6.9	7.1	7.3
Leaded	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.2	1.2
Unleaded	5.4	5.4	5.4	5.5	5.5	5.6	5.8	5.9	5.7	5.7	5.9	6.1
Jet Fuel	1.4	1.4	1.5	1.3	1.3	1.3	1.4	1.3	1.4	1.4	1.3	1.5
Distillate Fuel Oil	3.0	2.7	2.7	2.9	2.9	2.9	2.6	2.8	2.8	2.8	2.9	3.1
Residual Fuel Oil	1.0	1.0	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1
<b>1989</b>												
Finished Motor Gasoline	6.9	6.6	6.6	6.9	6.9	7.3	7.4	7.2				
Leaded	1.0	0.9	0.8	0.9	0.9	0.9	0.8	0.7				
Unleaded	5.9	5.7	5.8	6.0	6.1	6.4	6.6	6.4				
Jet Fuel	1.5	1.4	1.4	1.3	1.2	1.4	1.4	1.4				
Distillate Fuel Oil	3.0	2.8	2.7	2.8	2.7	2.8	2.8	2.9				
Residual Fuel Oil	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9				
Average for Four-Week Period Ending:												
<b>1989</b>	<b>09/01</b>	<b>09/08</b>	<b>09/15</b>	<b>09/22</b>	<b>09/29</b>	<b>10/06</b>	<b>10/13</b>	<b>10/20</b>	<b>10/27</b>	<b>11/03</b>	<b>11/10</b>	
Finished Motor Gasoline	7.0	7.1	7.1	7.1	7.1	7.1	7.0	6.9	6.9	6.8	6.7	
Leaded	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	
Unleaded	6.4	6.4	6.4	6.5	6.5	6.4	6.4	6.3	6.3	6.3	6.2	
Jet Fuel	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
Distillate Fuel Oil	3.0	3.0	3.1	3.1	3.0	3.0	2.9	2.9	2.9	2.9	2.9	
Residual Fuel Oil	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	

<sup>1</sup> Calculated as 4-week average gross inputs divided by the latest reported monthly operable capacity. See Glossary. Percentages are calculated using unrounded numbers.

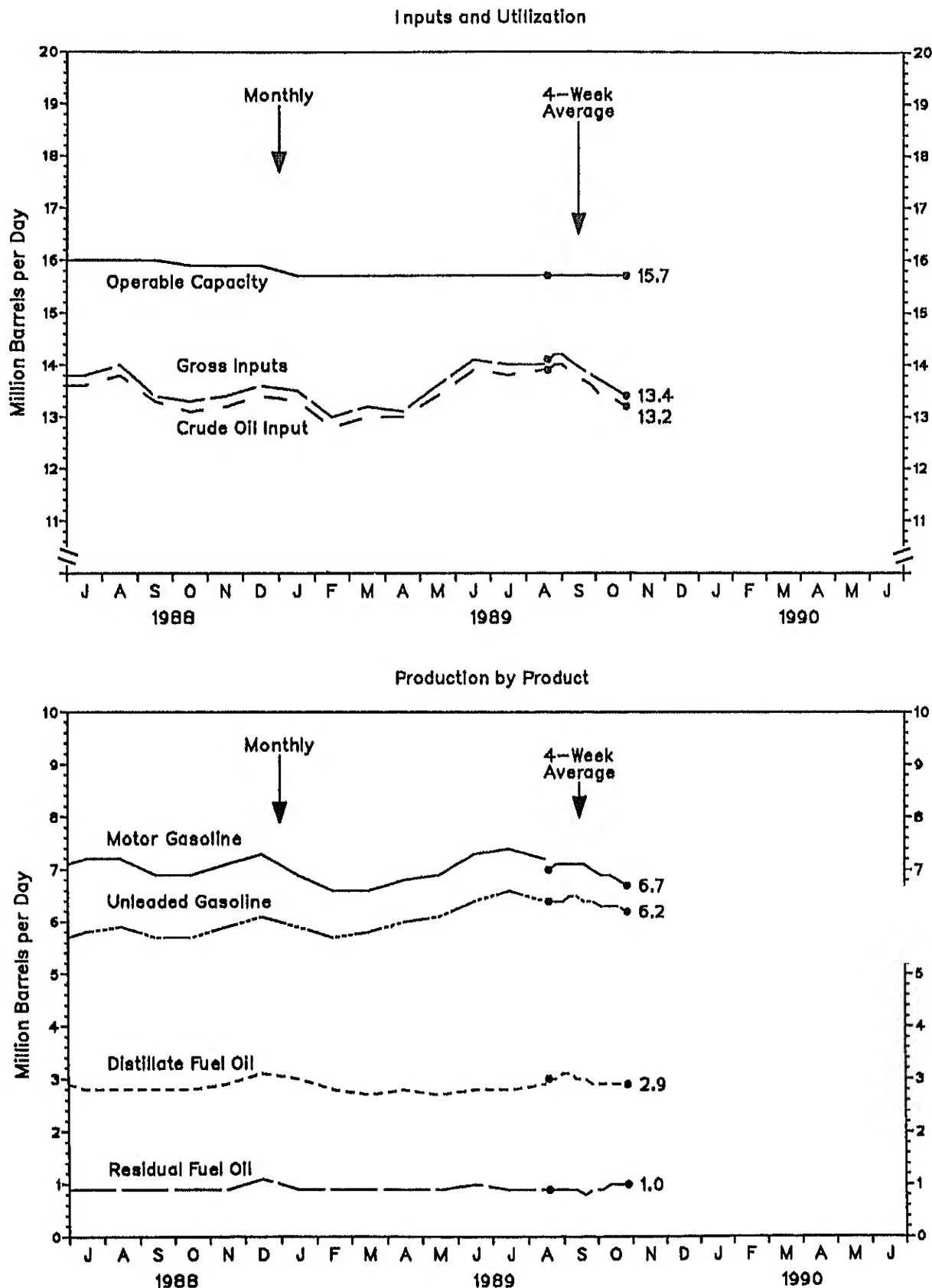
E=Estimate based on data published for the most recent month in the *Petroleum Supply Monthly*.

Note: Production statistics represent net production (i.e., refinery output minus refinery input).

Source: See page 25.



**Figure 1. Refinery Activity**  
(Million Barrels per Day)



Source: See page 25.

**Table 3. Stocks Of Crude Oil And Petroleum Products,<sup>1</sup> U.S. Totals**  
(Million Barrels)

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Crude Oil <sup>2</sup>	1,586.0	1,563.4	1,556.7	1,539.2	1,541.7	1,548.0	1,556.6	1,592.0	1,605.7	1,610.0	1,634.9	1,607.5
Motor Gasoline	40.5	43.6	43.1	40.8	39.0	37.9	37.6	38.5	38.5	38.2	37.1	37.4
Jet Fuel	49.7	48.3	48.1	47.2	47.4	45.9	46.7	47.7	50.2	49.8	51.0	49.9
Distillate Fuel Oil	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9
Blending Components	40.5	43.6	43.1	40.8	39.0	37.9	37.6	38.5	38.5	38.2	37.1	37.4
Other Oils <sup>3</sup>	152.8	145.5	146.4	160.8	171.2	179.3	191.2	196.0	192.0	190.3	182.8	167.2
Total (Excl. SPR)	1,054.3	1,031.5	1,014.3	1,031.0	1,065.8	1,081.8	1,077.8	1,071.4	1,073.7	1,074.4	1,072.6	1,037.7
Crude Oil In SPR	542.7	544.1	544.9	547.3	547.9	550.1	551.3	552.1	554.7	556.0	558.7	559.5
Total (Incl. SPR)	1,597.0	1,575.7	1,559.3	1,578.3	1,613.8	1,631.8	1,629.1	1,623.5	1,628.4	1,630.4	1,631.3	1,597.2
<b>1988</b>												
Crude Oil <sup>2</sup>	1,597.0	1,575.7	1,559.3	1,578.3	1,613.8	1,631.8	1,629.1	1,623.5	1,628.4	1,630.4	1,631.3	1,597.2
Motor Gasoline	40.5	43.6	43.1	40.8	39.0	37.9	37.6	38.5	38.5	38.2	37.1	37.4
Jet Fuel	49.7	48.3	48.1	47.2	47.4	45.9	46.7	47.7	50.2	49.8	51.0	49.9
Distillate Fuel Oil	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9
Blending Components	40.5	43.6	43.1	40.8	39.0	37.9	37.6	38.5	38.5	38.2	37.1	37.4
Other Oils <sup>3</sup>	152.8	145.5	146.4	160.8	171.2	179.3	191.2	196.0	192.0	190.3	182.8	167.2
Total (Excl. SPR)	1,054.3	1,031.5	1,014.3	1,031.0	1,065.8	1,081.8	1,077.8	1,071.4	1,073.7	1,074.4	1,072.6	1,037.7
Crude Oil In SPR	542.7	544.1	544.9	547.3	547.9	550.1	551.3	552.1	554.7	556.0	558.7	559.5
Total (Incl. SPR)	1,597.0	1,575.7	1,559.3	1,578.3	1,613.8	1,631.8	1,629.1	1,623.5	1,628.4	1,630.4	1,631.3	1,597.2
<b>1989</b>												
Crude Oil <sup>2</sup>	1,619.5	1,601.6	1,569.5	1,595.9	1,622.4	1,607.7	1,647.9	1,654.4				
Motor Gasoline	40.5	43.6	43.1	40.8	39.0	37.9	37.6	38.5				
Jet Fuel	49.7	48.3	48.1	47.2	47.4	45.9	46.7	47.7				
Distillate Fuel Oil	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9				
Blending Components	40.5	43.6	43.1	40.8	39.0	37.9	37.6	38.5				
Other Oils <sup>3</sup>	152.8	145.5	146.4	160.8	171.2	179.3	191.2	196.0				
Total (Excl. SPR)	1,054.3	1,031.5	1,014.3	1,031.0	1,065.8	1,081.8	1,077.8	1,071.4				
Crude Oil In SPR	561.5	563.9	566.2	568.0	570.4	571.7	574.4	575.4				
Total (Incl. SPR)	1,619.5	1,601.6	1,569.5	1,595.9	1,622.4	1,607.7	1,647.9	1,654.4				
<b>Week Ending:</b>												
<b>1989</b>	<b>09/01</b>	<b>09/08</b>	<b>09/15</b>	<b>09/22</b>	<b>09/29</b>	<b>10/06</b>	<b>10/13</b>	<b>10/20</b>	<b>10/27</b>	<b>11/03</b>	<b>11/10</b>	
Crude Oil <sup>2</sup>	1,642.3	1,646.4	1,639.3	1,643.1	1,658.6	1,669.1	1,667.3	1,663.6	1,670.3	1,667.1	1,675.0	
Motor Gasoline	40.5	43.6	43.1	40.8	39.0	37.9	37.6	38.5	38.5	38.2	37.1	
Jet Fuel	49.7	48.3	48.1	47.2	47.4	45.9	46.7	47.7	50.2	49.8	51.0	
Distillate Fuel Oil	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	
Blending Components	40.5	43.6	43.1	40.8	39.0	37.9	37.6	38.5	38.5	38.2	37.1	
Other Oils <sup>3</sup>	152.8	145.5	146.4	160.8	171.2	179.3	191.2	196.0	192.0	190.3	182.8	
Total (Excl. SPR)	1,054.3	1,031.5	1,014.3	1,031.0	1,065.8	1,081.8	1,077.8	1,071.4	1,073.7	1,074.4	1,072.6	
Crude Oil In SPR	561.5	563.9	566.2	568.0	570.4	571.7	574.4	575.4				
Total (Incl. SPR)	1,619.5	1,601.6	1,569.5	1,595.9	1,622.4	1,607.7	1,647.9	1,654.4				

<sup>1</sup> Product stocks include those stocks held at refineries, in pipelines, and at bulk terminals. Stocks held at natural gas processing plants are included in "Other Oils" and in totals. All stock levels are as of the end of the period.

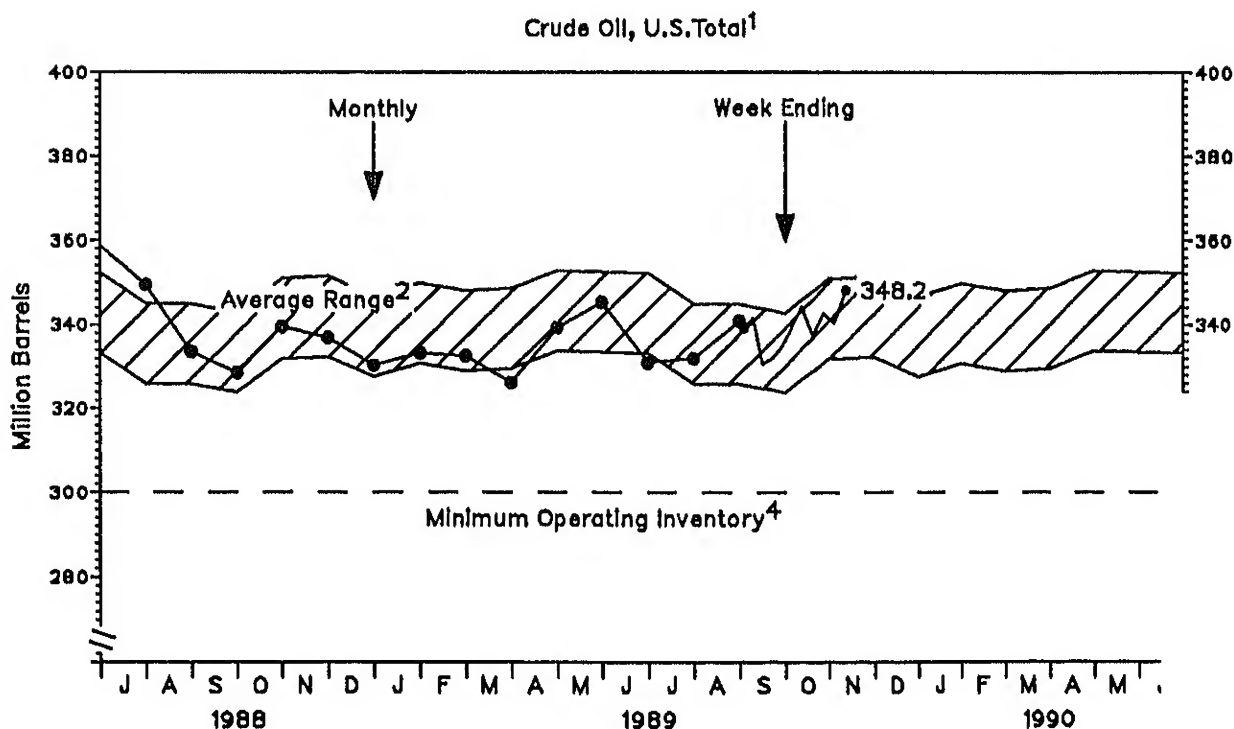
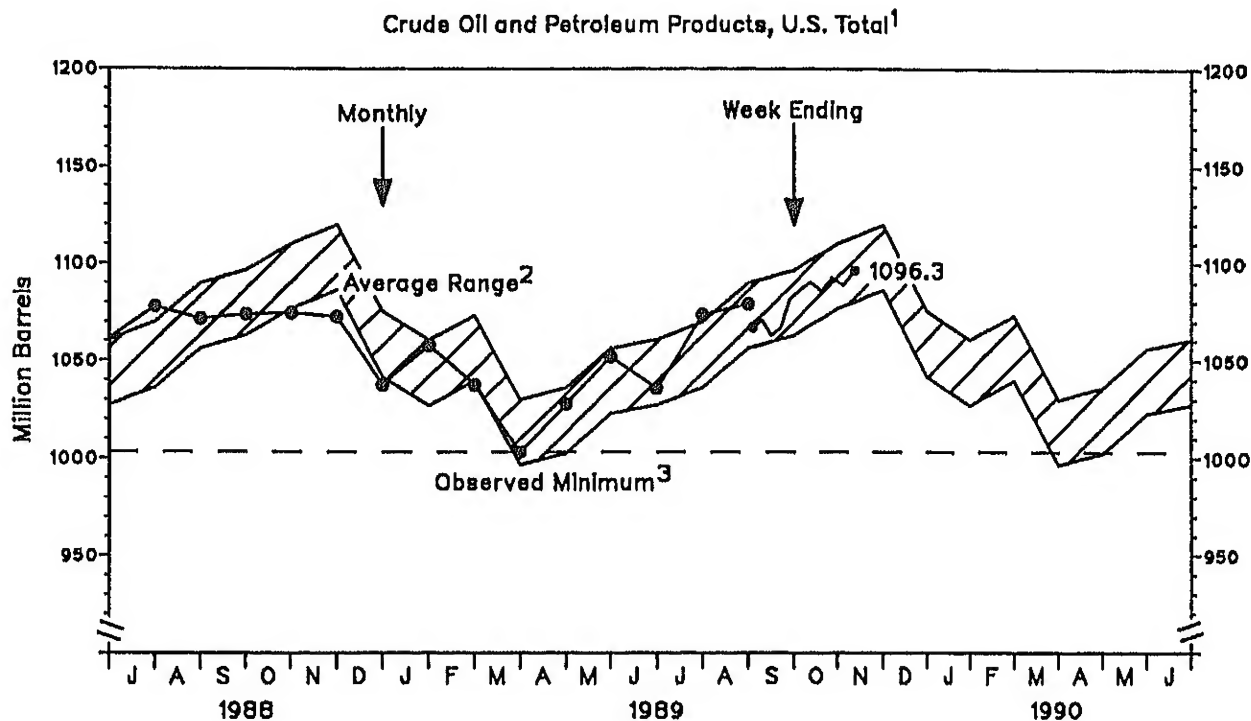
<sup>2</sup> Crude oil stocks include those stocks held at refineries, in pipelines, in lease tanks, and in transit to refineries, and do not include those held in the Strategic Petroleum Reserve.

<sup>3</sup> Included are stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids and LRG's, other hydrocarbons and alcohol, aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, waxes, coke, asphalt, road oil, and miscellaneous oils. E=Estimated. See Glossary for definition of "Stock Change (Refined Products)" for explanation of other oils estimation methodology.

Note: Data may not add to total due to independent rounding.

Source: See page 25.

**Figure 2. Stocks of Crude Oil and Petroleum Products  
(Million Barrels)**



<sup>1</sup> Excludes stocks held in the Strategic Petroleum Reserve and includes crude oil in transit to refineries.

<sup>2</sup> Average level and width of average range are based on 3 years of monthly data: July 1986 - June 1989. The seasonal pattern is based on monthly data. See Appendix for further explanation.

<sup>3</sup> The observed minimum for total stocks in the last 36-month period was 1003.2 million barrels, occurring in March 1989. See Appendix for further explanation.

<sup>4</sup> The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems begin to appear in a defined distribution system. In its 1988 study, the NPC estimated this inventory level for crude oil to be 300 million barrels. See Appendix for further explanation.

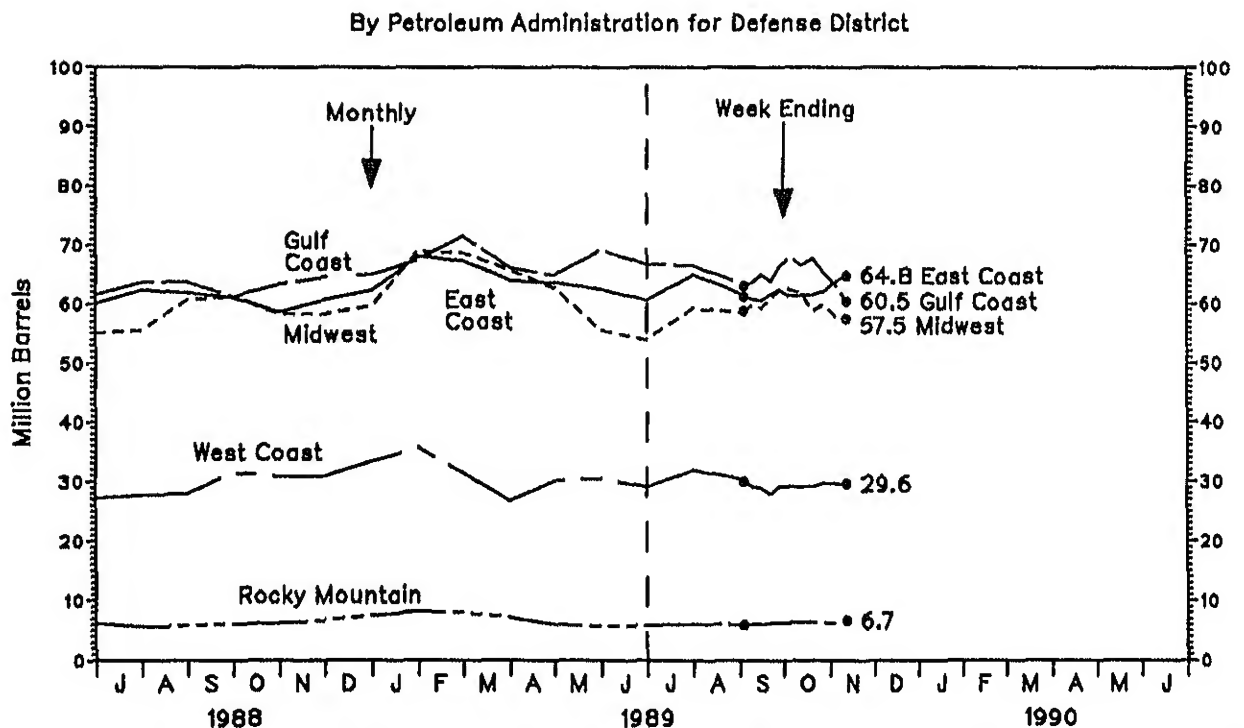
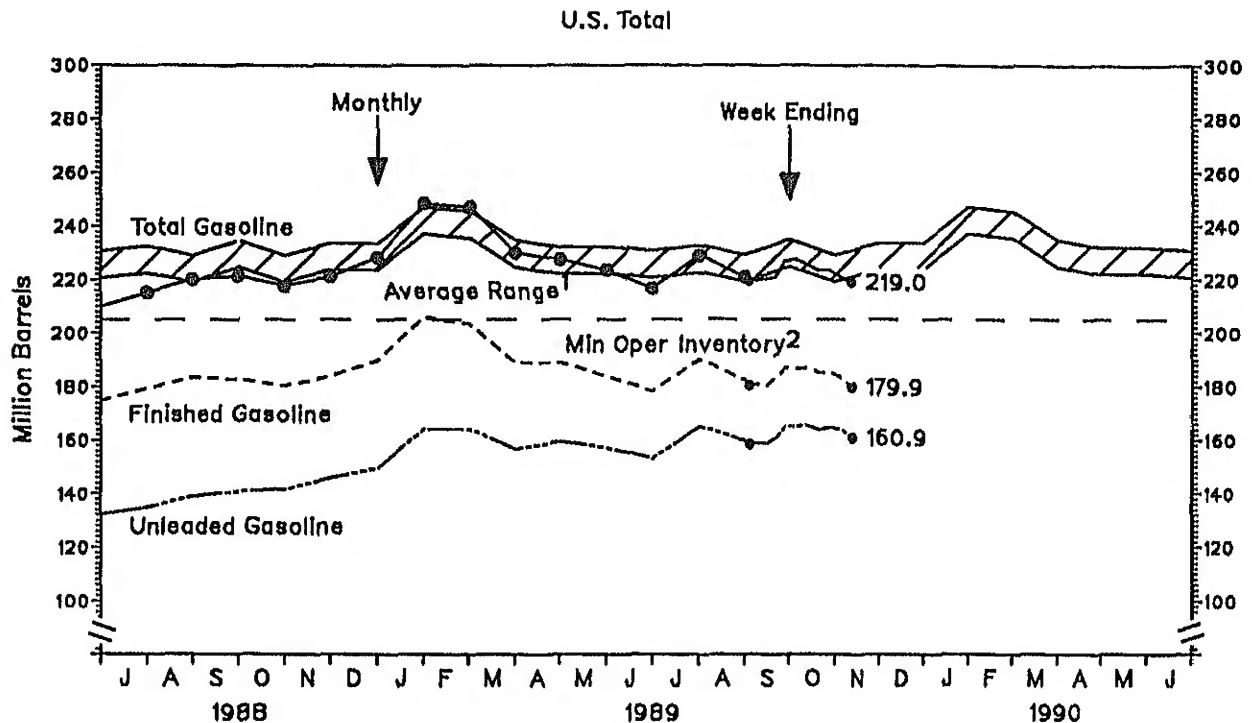
Source: See page 25.

**Table 4. Stocks of Motor Gasoline By Petroleum Administration for Defense District (PADD)**  
(Million Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Finished Motor Gasoline	210.6	206.6	205.0	201.0	195.9	192.6	188.9	188.0	191.2	181.8	188.1	188.8
Loaded	70.7	68.7	65.1	59.4	57.6	55.6	54.7	53.8	55.0	51.6	53.5	53.1
Unloaded	139.9	137.9	139.9	141.8	138.4	136.9	134.2	134.2	136.2	130.2	134.6	135.7
Blending Components	40.5	43.5	43.1	40.8	39.0	37.9	37.5	38.5	38.5	36.2	37.1	37.4
Total Gasoline	251.1	250.1	248.1	241.8	234.9	230.4	226.4	226.5	229.6	218.0	225.2	226.2
East Coast (PADD I)	74.3	68.5	69.0	68.9	65.5	66.7	69.5	67.0	64.4	59.9	63.1	63.0
Midwest (PADD II)	71.4	70.2	68.5	66.9	63.5	58.0	56.7	59.9	61.2	57.5	61.9	61.2
Gulf Coast (PADD III)	68.3	72.9	72.6	68.0	66.4	66.9	63.4	63.6	66.4	65.1	64.6	65.9
Rocky Mountain (PADD IV)	8.0	8.5	8.4	8.0	7.4	6.1	5.4	5.7	6.1	5.7	6.1	6.8
West Coast (PADD V)	29.1	30.0	29.5	30.5	32.1	32.7	31.5	30.4	31.5	29.9	29.5	29.4
<b>1988</b>												
Finished Motor Gasoline	200.8	203.0	194.4	190.1	188.8	174.9	179.4	183.5	182.7	180.4	183.9	189.9
Loaded	53.9	51.5	48.8	47.1	44.9	42.7	44.6	44.5	41.9	38.7	38.2	40.2
Unloaded	146.9	151.5	145.6	143.1	144.0	132.2	134.9	139.0	140.8	141.7	145.7	149.7
Blending Components	39.5	38.4	37.3	36.6	37.3	35.2	35.8	36.6	38.7	37.3	37.3	38.6
Total Gasoline	240.3	241.4	231.7	226.7	226.1	209.1	215.3	220.1	221.3	218.7	221.2	228.4
East Coast (PADD I)	63.4	71.5	65.2	63.7	53.3	53.1	62.5	61.9	61.2	58.7	60.7	62.5
Midwest (PADD II)	63.4	66.3	66.3	63.0	63.4	55.0	55.6	60.7	61.3	58.4	58.3	59.8
Gulf Coast (PADD III)	68.9	64.7	61.0	62.3	62.8	61.6	63.7	63.7	61.3	63.4	64.6	65.1
Rocky Mountain (PADD IV)	7.4	7.9	7.6	7.1	6.8	6.2	5.7	5.8	6.1	6.3	6.7	7.5
West Coast (PADD V)	32.2	31.2	28.7	30.6	29.9	27.2	27.8	28.0	31.5	30.9	30.9	33.5
<b>1989</b>												
Finished Motor Gasoline	205.8	203.6	189.0	188.9	183.9	178.4	180.2	182.4				
Loaded	41.5	39.5	32.4	29.4	26.8	25.2	25.1	22.7				
Unloaded	164.2	164.1	156.7	159.4	157.1	153.1	155.1	159.7				
Blending Components	42.8	43.5	41.0	38.6	39.7	38.2	38.7	39.4				
Total Gasoline	248.5	247.1	230.0	227.5	223.6	216.6	218.9	220.9				
East Coast (PADD I)	68.1	67.4	64.1	63.6	52.6	50.7	55.0	51.9				
Midwest (PADD II)	69.0	68.7	65.8	62.8	55.6	54.0	59.3	58.6				
Gulf Coast (PADD III)	67.5	71.6	66.2	64.9	69.2	66.8	66.5	63.6				
Rocky Mountain (PADD IV)	8.2	8.0	7.2	6.1	5.7	5.9	6.2	6.0				
West Coast (PADD V)	35.7	31.5	26.8	30.1	30.6	29.2	31.9	30.6				
<b>Week Ending:</b>												
<b>1989</b>	<b>09/01</b>	<b>09/08</b>	<b>09/15</b>	<b>09/22</b>	<b>09/29</b>	<b>10/06</b>	<b>10/13</b>	<b>10/20</b>	<b>10/27</b>	<b>11/03</b>	<b>11/10</b>	
Finished Motor Gasoline	180.5	180.9	180.5	183.4	185.3	185.6	185.8	185.5	185.4	183.5	179.9	
Loaded	22.0	21.9	21.7	22.4	21.9	21.5	21.3	21.4	20.4	19.5	19.0	
Unloaded	158.5	159.0	158.8	161.0	163.1	164.1	164.5	164.0	165.0	164.0	160.9	
Blending Components	38.9	38.6	39.5	37.5	39.8	41.1	38.9	38.3	38.2	37.7	39.1	
Total Gasoline	219.4	219.6	220.1	221.0	226.7	227.6	225.7	223.8	223.6	221.2	219.0	
East Coast (PADD I)	61.3	60.8	60.6	61.7	62.5	61.4	61.5	61.6	62.2	63.0	64.0	
Midwest (PADD II)	58.9	59.2	59.4	61.0	62.3	62.5	62.0	58.8	59.9	57.9	57.5	
Gulf Coast (PADD III)	63.1	65.7	65.0	64.0	66.4	68.0	66.6	67.7	65.2	63.3	60.6	
Rocky Mountain (PADD IV)	6.0	6.1	6.1	6.3	6.3	6.4	6.4	6.4	6.3	6.3	6.7	
West Coast (PADD V)	30.1	29.2	29.0	25.6	25.1	29.3	29.2	29.1	29.8	29.7	29.6	

Note: PADD data may not add to total due to independent rounding.  
Source: See page 25.

**Figure 3. Stocks of Motor Gasoline  
(Million Barrels)**



<sup>1</sup> Average level and width of average range are based on 3 years of monthly data: July 1986 - June 1989. The seasonal pattern is based on 7 years of monthly data. See Appendix for further explanation.

<sup>2</sup> The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1988 study, the NPC estimated this inventory level for total motor gasoline to be 205 million barrels. See Appendix for further explanation.

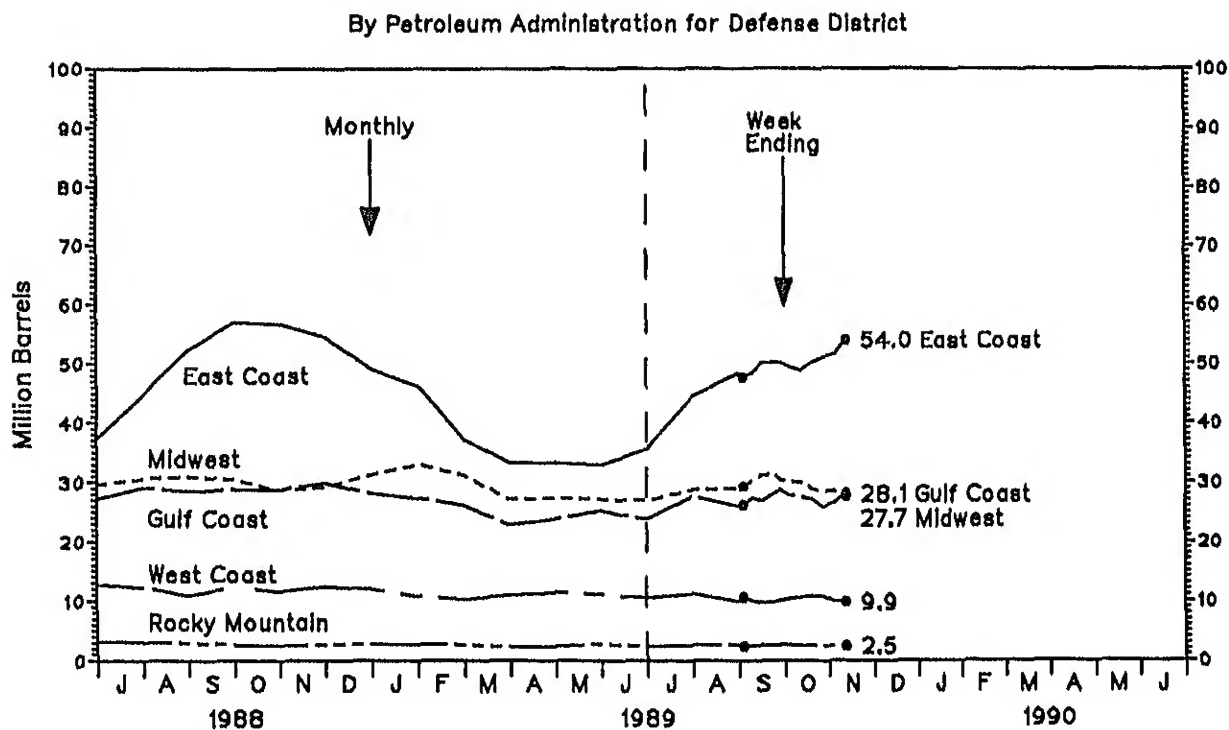
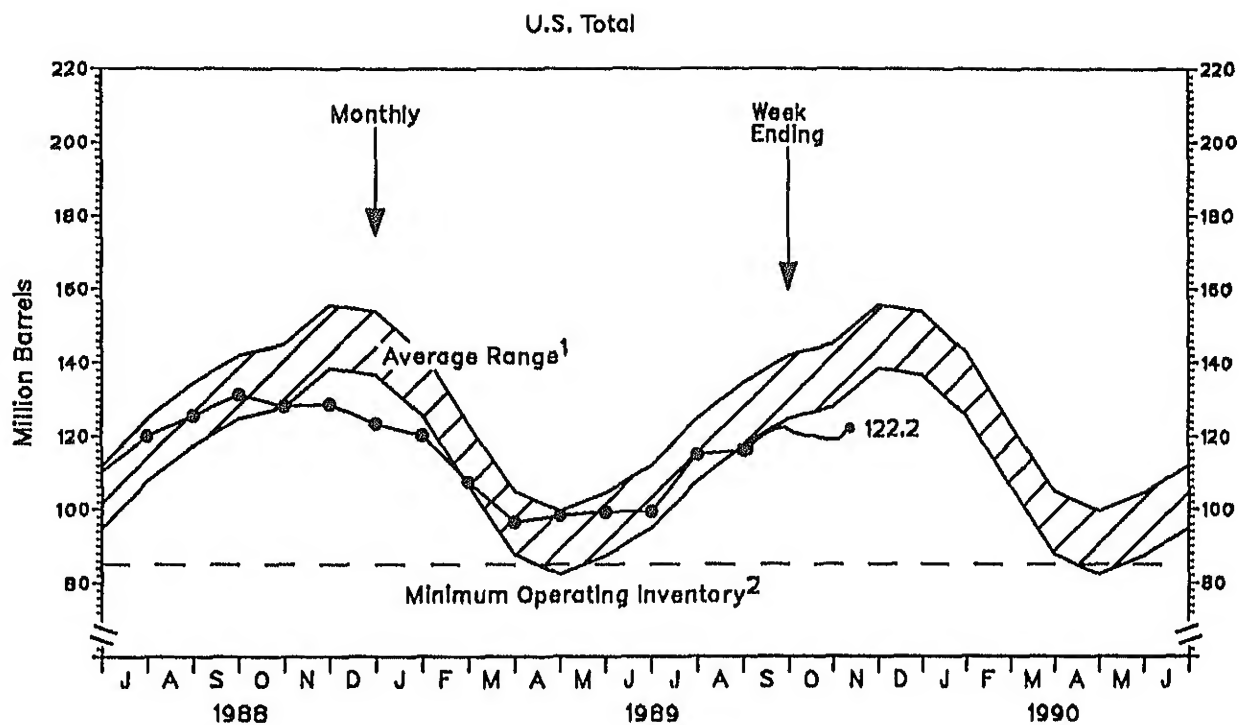
Source: See page 25.

**Table 5. Stocks of Distillate Fuel Oil by Petroleum Administration for Defense District (PADD)**  
(Million Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Total U.S.	141.3	123.7	109.3	100.3	101.3	104.4	114.6	124.7	126.8	121.0	128.0	134.5
East Coast (PADD I)	65.3	48.8	41.5	36.1	34.6	37.0	44.8	50.5	52.4	53.4	52.1	53.8
Midwest (PADD II)	34.0	33.3	30.3	29.1	28.7	29.8	29.8	31.9	31.5	26.7	33.1	34.6
Gulf Coast (PADD III)	27.7	27.6	23.9	22.6	24.0	25.0	27.6	29.5	29.4	28.2	29.2	31.5
Rocky Mountain (PADD IV)	3.2	3.3	3.1	2.7	2.7	2.5	2.5	2.6	2.6	2.3	2.6	3.1
West Coast (PADD V)	11.1	10.8	10.4	9.8	11.4	11.0	9.9	10.2	10.8	10.4	11.0	11.5
<b>1988</b>												
Total U.S.	128.1	110.3	89.8	95.0	104.9	110.4	119.9	125.7	131.4	128.2	128.8	123.6
East Coast (PADD I)	48.1	44.4	33.0	30.0	34.9	37.4	44.7	52.3	57.0	56.7	54.6	49.2
Midwest (PADD II)	34.4	29.8	23.3	26.6	28.9	29.7	30.6	31.0	30.5	28.7	29.2	31.3
Gulf Coast (PADD III)	31.7	23.1	21.8	24.7	25.4	27.3	29.2	28.5	28.9	28.8	29.9	28.2
Rocky Mountain (PADD IV)	3.3	3.2	2.3	2.4	2.9	3.2	3.2	3.0	2.7	2.6	2.7	2.8
West Coast (PADD V)	10.6	9.7	9.5	11.3	12.8	12.7	12.3	10.9	12.3	11.6	12.4	12.0
<b>1989</b>												
Total U.S.	120.3	107.6	96.6	98.4	99.3	99.4	115.0	116.1				
East Coast (PADD I)	46.3	37.2	33.3	33.2	32.9	35.6	44.5	48.4				
Midwest (PADD II)	33.0	31.2	27.2	27.4	27.2	27.0	28.8	29.0				
Gulf Coast (PADD III)	27.4	26.2	22.9	23.9	25.3	23.9	27.7	26.1				
Rocky Mountain (PADD IV)	2.8	2.7	2.3	2.4	2.8	2.4	2.6	2.6				
West Coast (PADD V)	10.8	10.3	11.0	11.6	11.1	10.6	11.3	10.0				
<b>Week Ending:</b>												
<b>1989</b>	<b>09/01</b>	<b>09/08</b>	<b>09/15</b>	<b>09/22</b>	<b>09/29</b>	<b>10/06</b>	<b>10/13</b>	<b>10/20</b>	<b>10/27</b>	<b>11/03</b>	<b>11/10</b>	
Total U.S.	118.2	118.9	120.7	121.9	122.4	121.1	120.2	119.9	119.0	119.2	122.2	
East Coast (PADD I)	47.7	48.5	50.1	50.1	50.3	49.5	49.0	50.3	51.1	51.6	54.0	
Midwest (PADD II)	29.3	30.4	31.2	31.5	30.5	30.3	30.0	29.0	28.8	28.5	27.7	
Gulf Coast (PADD III)	26.2	27.5	26.9	27.9	28.8	27.9	27.7	27.3	26.0	26.7	28.1	
Rocky Mountain (PADD IV)	2.4	2.5	2.7	2.6	2.7	2.9	2.7	2.5	2.5	2.4	2.5	
West Coast (PADD V)	10.6	10.1	9.8	9.8	10.1	10.5	10.7	10.9	10.8	9.9	9.9	

Note: PADD data may not add to total due to independent rounding.  
Source: See page 25.

**Figure 4. Stocks of Distillate Fuel Oil  
(Million Barrels)**



<sup>1</sup> Average level and width of average range are based on 3 years of monthly data: July 1986 - June 1989. The seasonal pattern is based on 7 years of monthly data. See Appendix for further explanation.

<sup>2</sup> The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1988 study, the NPC estimated this inventory level for distillate fuel oil to be 85 million barrels. See Appendix for further explanation.

Source: See page 25.

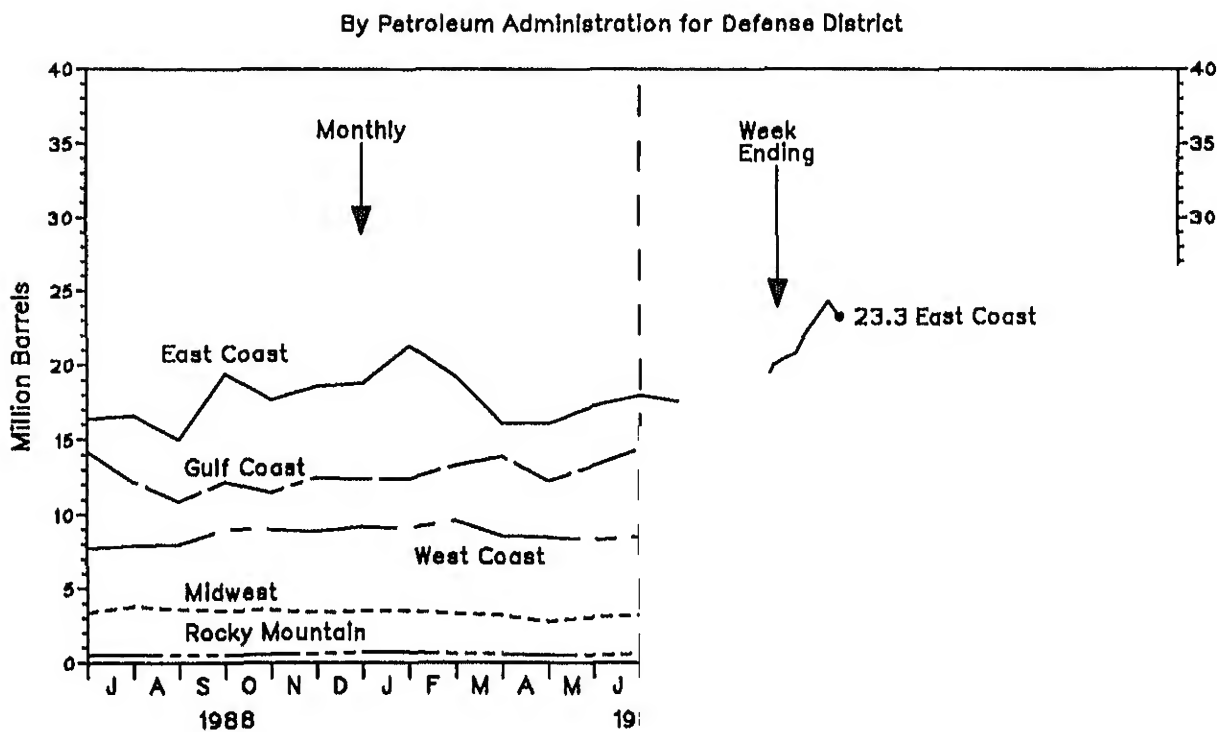
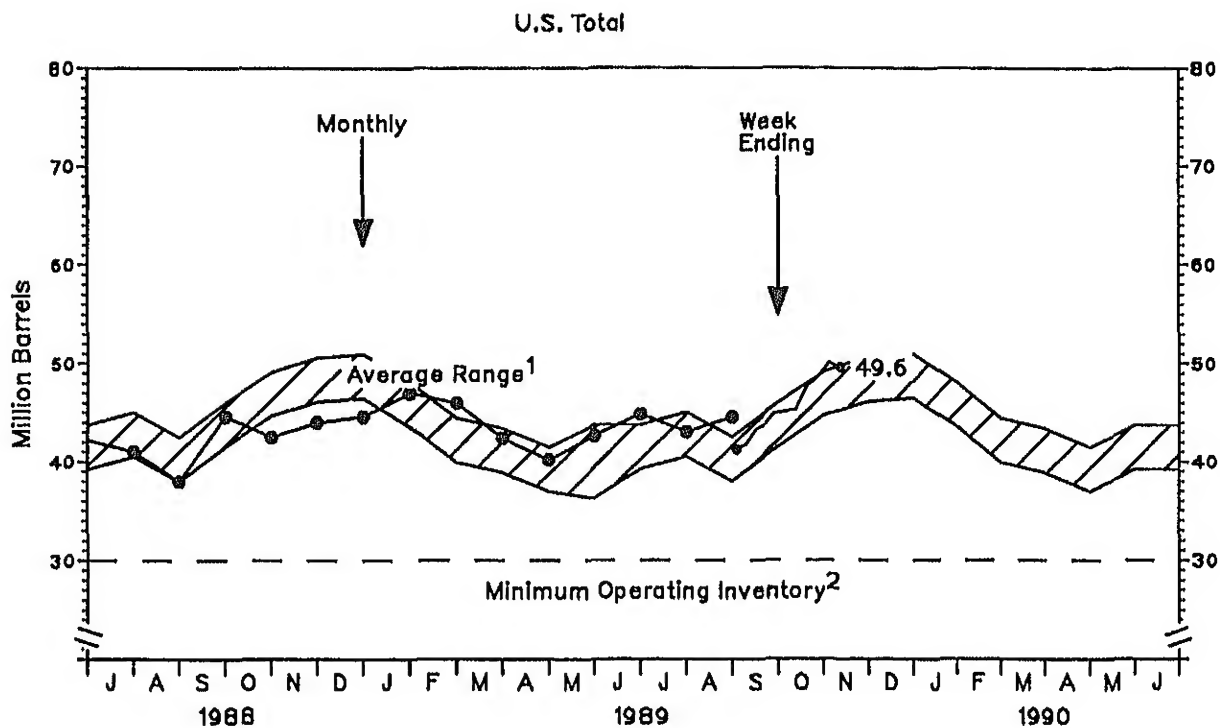
**Table 6. Stocks of Residual Fuel Oil by Petroleum Administration for Defense District (PADD)**  
(Million Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Total U.S.	44.9	38.1	39.3	35.9	40.4	41.4	44.7	45.7	44.4	45.6	50.0	47.4
East Coast (PADD I)	21.5	17.4	16.7	15.6	17.9	19.2	19.8	21.3	21.2	21.2	23.0	23.1
Midwest (PADD II)	2.8	2.7	3.1	3.1	2.8	2.7	2.9	3.0	2.9	2.5	3.1	3.0
Gulf Coast (PADD III)	11.9	10.4	10.6	9.3	11.1	11.6	13.4	12.1	10.9	13.1	13.4	12.6
Rocky Mountain (PADD IV)	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4
West Coast (PADD V)	8.4	7.4	8.6	7.5	8.2	7.4	8.3	8.9	9.0	8.4	10.0	8.3
<b>1988</b>												
Total U.S.	46.0	46.1	43.7	42.8	45.7	42.2	41.0	38.0	44.6	42.5	44.0	44.6
East Coast (PADD I)	19.6	19.7	17.8	16.2	18.8	16.4	16.6	15.0	19.4	17.7	18.6	18.8
Midwest (PADD II)	3.2	3.1	2.9	3.2	3.2	3.4	3.8	3.6	3.5	3.6	3.4	3.5
Gulf Coast (PADD III)	14.5	14.5	14.2	15.2	15.4	14.2	12.2	10.9	12.2	11.5	12.5	12.4
Rocky Mountain (PADD IV)	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7
West Coast (PADD V)	8.3	7.5	8.5	7.8	7.8	7.7	7.9	8.0	9.0	9.0	8.9	9.2
<b>1989</b>												
Total U.S.	47.0	46.0	42.4	40.2	42.6	44.8	43.0	44.5				
East Coast (PADD I)	21.3	19.2	16.1	16.1	17.3	18.0	17.5	19.1				
Midwest (PADD II)	3.5	3.3	3.2	2.8	3.1	3.2	3.1	3.1				
Gulf Coast (PADD III)	12.4	13.3	13.9	12.3	13.3	14.4	13.7	15.0				
Rocky Mountain (PADD IV)	0.7	0.6	0.6	0.5	0.5	0.6	0.6	0.6				
West Coast (PADD V)	9.1	9.6	8.6	8.5	8.3	8.5	8.1	6.7				
<b>Week Ending:</b>												
<b>1989</b>	<b>09/01</b>	<b>09/08</b>	<b>09/15</b>	<b>09/22</b>	<b>09/29</b>	<b>10/06</b>	<b>10/13</b>	<b>10/20</b>	<b>10/27</b>	<b>11/03</b>	<b>11/10</b>	
Total U.S.	41.2	41.7	43.3	43.7	44.9	45.1	45.3	47.7	48.7	50.1	49.6	
East Coast (PADD I)	17.1	17.4	18.0	18.7	20.0	20.5	20.8	22.2	23.3	24.3	23.3	
Midwest (PADD II)	3.1	3.2	3.3	3.1	3.1	3.1	3.2	3.4	3.0	3.1	3.3	
Gulf Coast (PADD III)	13.5	13.3	14.0	13.8	13.5	12.6	12.9	14.1	14.4	14.8	14.2	
Rocky Mountain (PADD IV)	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.4	
West Coast (PADD V)	6.9	7.2	7.3	7.6	7.7	8.3	7.8	7.6	7.5	7.5	8.3	

Note: PADD data may not add to total due to independent rounding.  
Source: See page 25.



**Figure 5. Stocks of Residual Fuel Oil  
(Million Barrels)**

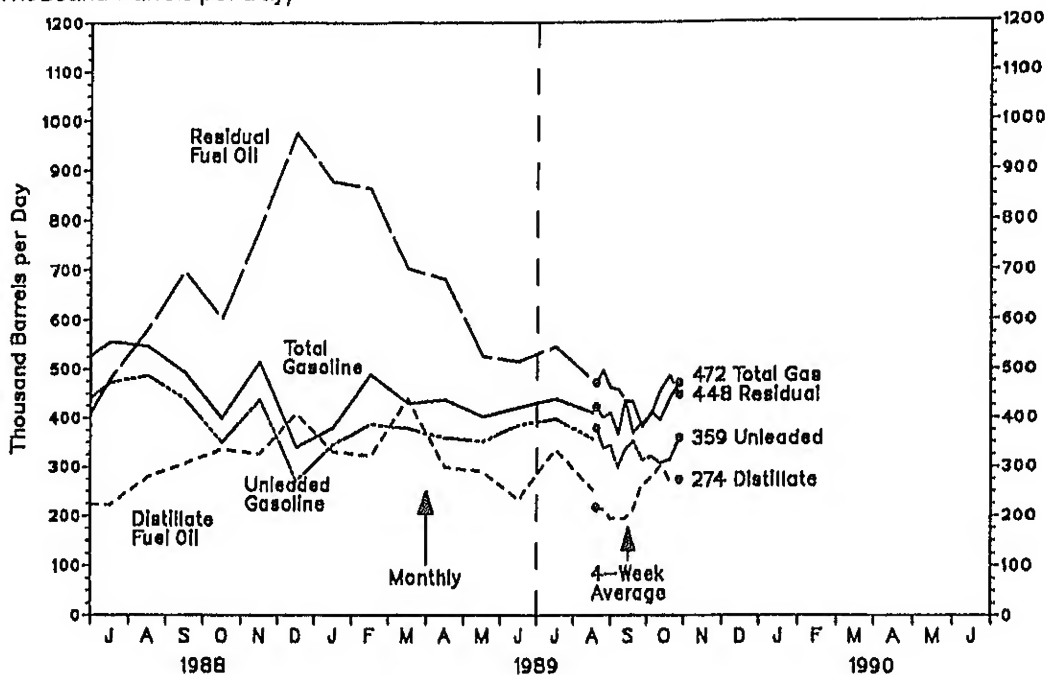


<sup>1</sup> Average level and width of average range are based on 3 years of monthly data. See Appendix for further explanation.

<sup>2</sup> The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the minimum level of inventory that must be maintained to ensure that oil begins to appear in a defined distribution system. In its 1988 study, the NPC estimate for further explanation.

Source: See page 25.

**Figure 6. Imports of Petroleum Products By Product**  
(Thousand Barrels per Day)



**Table 7. Imports of Petroleum Products By Product**  
(Thousand Barrels per Day)

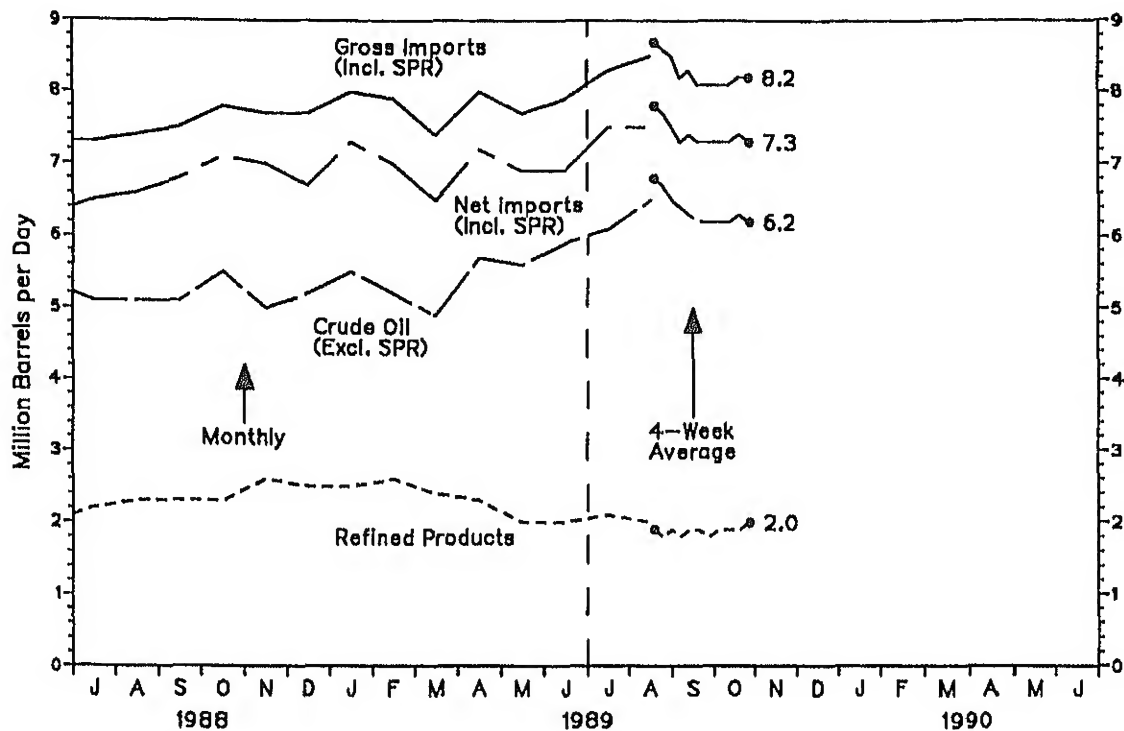
Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Total Motor Gasoline	474	372	419	404	386	412	515	494	467	454	548	386
Finished Leaded	37	16	35	12	22	37	69	22	51	26	75	27
Finished Unleaded	356	293	329	362	332	348	383	373	370	330	409	292
Blending Components	81	63	55	30	32	27	63	98	46	97	64	65
Jet Fuel	43	67	83	65	67	66	73	54	83	83	55	68
Distillate Fuel Oil	222	253	297	192	203	265	381	222	222	237	187	378
Residual Fuel Oil	701	668	559	476	505	481	721	512	526	414	568	650
Other Petroleum Products <sup>1</sup>	529	759	657	643	572	738	604	661	769	739	697	714
	391	452	392	448	524	497	556	547	493	400	515	340
	7	14	10	9	18	18	10	7	4	2	13	6
	350	383	339	390	420	410	472	487	439	350	438	271
	34	55	43	49	87	69	74	53	50	48	64	63
	85	70	97	84	112	78	88	103	61	146	79	74
	424	383	247	210	253	222	222	279	307	336	327	409
	805	901	650	495	432	336	479	581	698	603	785	975
	814	800	690	866	809	784	852	787	735	793	939	698
Total Motor Gasoline	380	490	429	437	403	421	438	410				
Finished Leaded	4	5	3	12	5	6	1	0				
Finished Unleaded	345	387	373	359	352	355	397	357				
Blending Components	30	95	48	66	47	30	40	53				
Jet Fuel	55	120	100	127	120	112	113	84				
Distillate Fuel Oil	331	322	434	269	290	252	335	254				
Residual Fuel Oil	577	663	703	681	520	515	545	478				
Other Petroleum Products <sup>1</sup>	846	553	729	745	593	674	691	733				
<b>Average for Four-Week Period Ending:</b>												
<b>1989</b>												
	09/01	09/08	09/15	09/22	09/29	10/06	10/13	10/20	10/27	11/03	11/10	
Total Motor Gasoline	422	402	409	367	435	432	392	412	398	438	472	
Finished Leaded	1	1	13	12	12	12	0	24	24	24	24	
Finished Unleaded	379	339	342	300	355	352	314	321	307	314	359	
Blending Components	42	62	54	55	88	69	68	67	65	100	89	
Jet Fuel	116	136	161	126	127	134	94	132	97	59	61	
Distillate Fuel Oil	217	212	195	194	195	211	263	276	301	272	274	
Residual Fuel Oil	472	497	461	458	439	369	390	407	456	486	449	
Other Petroleum Products <sup>1</sup>	682	597	673	671	706	773	674	700	663	603	676	

<sup>1</sup> Includes imports of kerosene, unfinished oils, liquefied petroleum gases, and other oils.

**Note:** Data may not add to total due to independent rounding.

**Source:** See page 25.

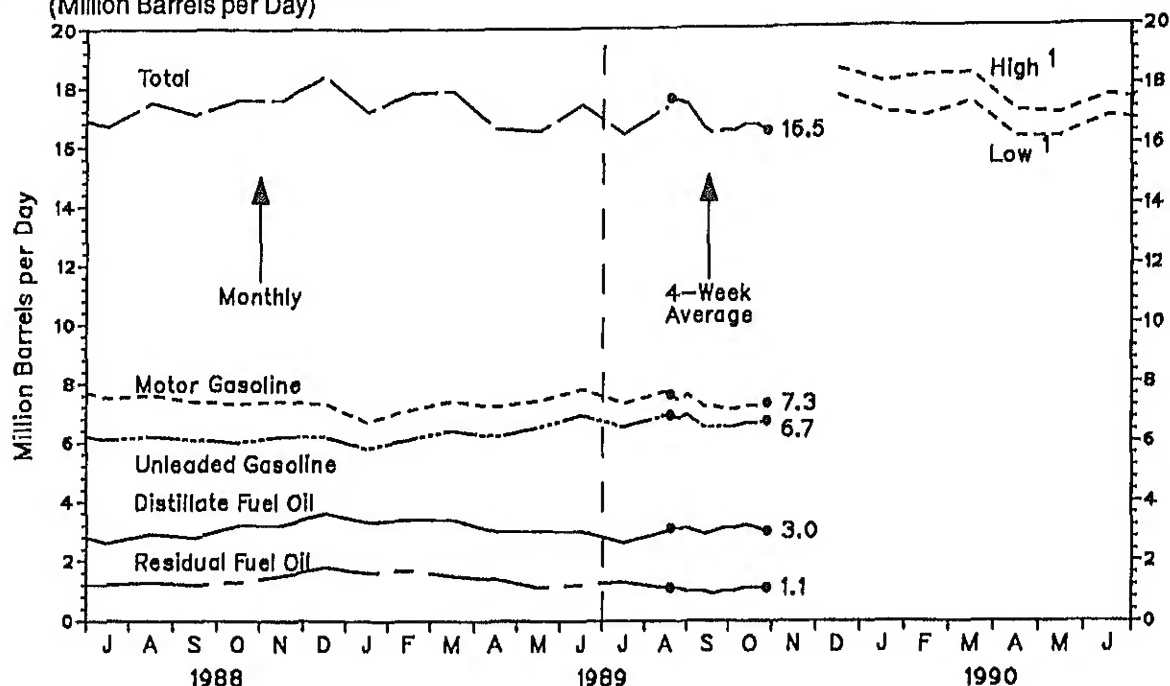
**Figure 7. Imports of Crude Oil and Petroleum Products**  
(Million Barrels per Day)



**Table 8. Imports of Crude Oil and Petroleum Products**  
(Million Barrels per Day)

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Crude Oil (Excl. SPR)	4.3	3.8	3.7	4.1	4.2	4.7	5.2	5.4	5.0	5.1	4.9	4.6
SPR	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Refined Products	2.0	2.1	2.0	1.8	1.7	2.0	2.3	1.9	2.1	1.9	2.1	2.2
Gross Imports (Incl. SPR)	6.4	6.0	5.8	5.9	6.1	6.8	7.6	7.5	7.2	7.1	7.1	6.8
Total Exports <sup>1</sup>	0.7	1.0	0.7	0.9	0.7	0.7	0.7	0.7	0.8	0.6	0.7	1.1
Net Imports (Incl. SPR)	5.7	5.0	5.1	5.0	5.4	6.1	6.9	6.8	6.4	6.4	6.3	5.8
<b>1988</b>												
Crude Oil (Excl. SPR)	4.6	4.6	4.8	5.1	5.3	5.3	5.1	5.1	5.1	5.5	5.0	5.2
SPR	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0
Refined Products	2.6	2.6	2.1	2.1	2.1	1.9	2.2	2.3	2.3	2.3	2.6	2.5
Gross Imports (Incl. SPR)	7.2	7.3	6.9	7.3	7.5	7.2	7.3	7.4	7.5	7.8	7.7	7.7
Total Exports <sup>1</sup>	0.9	0.9	0.8	0.7	0.8	0.9	0.8	0.8	0.7	0.7	0.7	1.0
Net Imports (Incl. SPR)	6.3	6.4	6.1	6.6	6.7	6.3	6.5	6.6	6.8	7.1	7.0	6.7

**Figure 8. Petroleum Products Supplied**  
(Million Barrels per Day)



<sup>1</sup> Projected. See Appendix for explanation of derivation of values.

**Table 9. Petroleum Products Supplied**  
(Million Barrels per Day)

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1987</b>												
Finished Motor Gasoline	6.5	6.8	7.0	7.3	7.5	7.5	7.6	7.5	7.2	7.3	7.2	7.3
Leaded	1.7	1.7	1.8	1.9	1.9	1.9	1.8	1.7	1.7	1.7	1.6	1.5
Unleaded	4.8	5.1	5.2	5.4	5.6	5.7	5.7	5.7	5.5	5.6	5.6	5.7
Jet Fuel	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.4	1.5
Distillate Fuel Oil	3.3	3.3	3.1	3.0	2.7	2.8	2.7	2.6	2.8	3.2	2.9	3.3
Residual Fuel Oil	1.5	1.5	1.2	1.2	1.0	1.2	1.3	1.2	1.3	1.1	1.2	1.4
Other Oils	4.0	3.8	3.5	3.7	3.5	3.9	4.1	3.9	4.0	3.9	3.7	4.0
Total	16.7	16.9	16.2	16.5	16.0	16.8	17.1	16.9	16.7	16.9	16.3	17.4
<b>1988</b>												
Finished Motor Gasoline	6.7	7.0	7.3	7.4	7.3	7.8	7.5	7.6	7.4	7.3	7.4	7.3
Leaded	1.3	1.4	1.4	1.4	1.4	1.5	1.3	1.3	1.3	1.3	1.2	1.1
Unleaded	5.4	5.6	5.9	6.0	5.9	6.3	6.1	6.2	6.1	6.0	6.2	6.2
Jet Fuel	1.6	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.4	1.5
Distillate Fuel Oil	3.6	3.6	3.5	2.9	2.8	2.9	2.6	2.9	2.8	3.2	3.2	3.6
Residual Fuel Oil	1.7	1.7	1.5	1.3	0.9	1.1	1.2	1.3	1.2	1.3	1.5	1.8
Other Oils	3.9	4.0	3.9	3.6	3.8	3.9	4.0	4.3	4.2	4.2	4.1	4.2
Total	17.4	17.8	17.6	16.6	16.2	17.1	16.7	17.5	17.1	17.6	17.6	18.4
<b>1989</b>												
Finished Motor Gasoline	6.7	7.1	7.4	7.2	7.4	7.8	7.5	7.7				
Leaded	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8				
Unleaded	5.8	6.1	6.4	6.2	6.5	6.9	6.5	6.9				
Jet Fuel	1.5	1.5	1.5	1.4	1.3	1.5	1.4	1.5				
Distillate Fuel Oil	3.3	3.4	3.4	3.0	3.0	3.0	2.6	3.0				
Residual Fuel Oil	1.6	1.7	1.5	1.4	1.1	1.2	1.3	1.1				
Other Oils	4.1	4.0	4.0	3.6	3.7	3.9	3.8	4.0				
Total	17.2	17.8	17.9	16.6	16.5	17.1	16.4	17.3				
<b>Average for Four-Week Period Ending:</b>												
<b>1989</b>	<b>09/01</b>	<b>09/08</b>	<b>09/15</b>	<b>09/22</b>	<b>09/29</b>	<b>10/06</b>	<b>10/13</b>	<b>10/20</b>	<b>10/27</b>	<b>11/03</b>	<b>11/10</b>	
Finished Motor Gasoline	7.6	7.4	7.6	7.4	7.2	7.2	7.1	7.1	7.2	7.2	7.3	
Leaded	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	
Unleaded	6.9	6.8	6.9	6.7	6.5	6.5	6.5	6.5	6.6	6.6	6.7	
Jet Fuel	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.5	1.5	1.5	
Distillate Fuel Oil	3.1	3.1	3.1	3.0	2.9	3.0	3.1	3.1	3.2	3.1	3.0	
Residual Fuel Oil	1.1	1.1	1.0	1.0	1.0	0.9	1.0	1.0	1.1	1.1	1.1	
Other Oils	4.2	4.2	4.1	4.0	3.9	3.8	3.7	3.7	3.7	3.7	3.6	
Total	17.6	17.5	17.4	17.0	16.6	16.4	16.5	16.5	16.7	16.7	16.5	

Note: Data may not add to total due to independent rounding.  
Source: See page 25.

**0. Refiner Acquisition Cost of Crude Oil**  
(Dollars per Barrel)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	25.91	20.91	15.02	13.01	12.99	13.12	11.44	11.97	13.29	13.20	13.22	13.66
	24.93	18.11	14.22	13.15	13.17	12.25	10.91	11.87	12.85	12.78	13.46	14.17
	25.63	19.76	14.80	13.05	13.05	12.89	11.26	11.93	13.13	13.05	13.30	13.84
	16.01	16.77	16.93	17.21	17.63	18.33	19.04	19.39	18.57	18.36	17.94	17.02
	16.45	16.98	17.26	17.89	18.25	18.71	19.26	19.32	18.57	18.53	18.14	17.20
	16.16	16.83	17.04	17.44	17.85	18.47	19.13	19.36	18.57	18.43	18.02	17.09
	15.82	15.61	14.92	15.88	16.35	15.83	14.65	14.36	13.97	12.90	12.61	13.88
	16.10	15.61	14.82	15.69	16.02	15.52	14.80	14.37	13.90	13.03	12.54	14.08
	15.92	15.61	14.88	15.81	16.22	15.71	14.71	14.36	13.94	12.96	12.58	13.97
	15.49	16.11	17.23	18.02	19.02	19.50	19.51	P17.23				
	15.98	16.50	17.77	19.19	19.06	18.27	17.97	P17.23				
	15.70	16.31	17.55	18.22	19.03	18.43	18.16	P17.23				

nary.

**1. Average Retail Selling Prices of Motor Gasoline and Residential Heating Oil**  
(Cents per Gallon, Including Taxes)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
oline												
ed Regular	113.7	103.4	89.4	81.5	65.2	59.5	82.2	77.9	73.7	71.1	75.2	76.4
ed Premium	133.6	129.2	116.0	103.1	107.5	110.0	104.5	93.9	101.0	98.7	98.3	99.4
ed Regular	119.4	112.0	98.1	88.8	92.3	95.5	89.0	84.3	86.0	83.1	82.1	82.8
es	119.0	111.9	98.3	89.5	92.7	95.8	89.5	84.8	86.4	83.7	82.7	83.0
al Heating Oil <sup>1</sup>	108.4	95.8	88.7	80.7	77.4	72.9	66.9	66.4	68.5	67.8	69.8	72.5
oline												
ed Regular	83.6	84.8	85.6	87.0	88.8	90.6	92.1	94.6	94.0	93.1	92.3	91.2
ed Premium	103.7	101.7	105.2	107.3	107.9	103.8	111.3	115.9	113.6	112.5	112.3	111.9
ed Regular	86.2	90.5	91.2	93.4	94.1	95.8	97.1	99.5	99.0	97.6	97.6	96.1
es	86.8	91.1	91.8	94.0	94.8	96.6	98.0	100.4	100.0	98.8	98.7	97.5
al Heating Oil <sup>1</sup>	78.5	79.9	79.1	78.7	78.6	77.8	78.7	78.8	78.9	81.2	83.5	84.0
oline												
ed Regular	88.1	85.9	85.0	88.3	91.1	91.0	92.3	94.5	93.3	91.0	90.4	88.6
ed Premium	109.5	108.2	107.4	108.8	110.5	111.1	112.3	113.8	113.0	111.9	111.6	110.1
ed Regular	93.3	91.3	90.4	93.0	95.5	95.5	96.7	98.7	97.4	95.6	94.9	93.0
es	94.7	92.8	92.0	94.6	97.0	97.1	98.4	100.4	99.2	97.5	97.2	95.3
al Heating Oil <sup>1</sup>	84.9	84.0	83.3	83.2	81.9	79.3	77.0	74.0	75.3	75.3	77.4	81.6
oline												
ed Regular	87.6	88.6	90.7	104.7	109.1				107.7			
ed Premium	109.1	110.0	111.5	122.1	127.1				121.5			
ed Regular	91.8	92.6	94.0	106.5	111.5				107.1			
es	94.4	95.5	97.4	109.8	115.1				107.1			
al Heating Oil <sup>1</sup>	85.0	85.5	87.1	97.6	86.7	84.2	P82.2	NA	NA			

Residential heating oil prices do not include taxes.

Not Available.

Provisional.

Source: See page 26.

**Table 12. World Crude Oil Prices<sup>1</sup>**  
(Dollars per Barrel)

Country	Type of Crude/API Gravity <sup>2</sup>	In Effect:							
		10 Nov 89	3 Nov 89	1 Jan 89	1 Jan 88	1 Jan 87	1 Jan 86	1 Jan 85	31 Dec 78
OPEC									
Saudi Arabia	Arabian Light 34'	16.95	16.80	18.15	17.52	16.15	28.00	29.00	12.70
Saudi Arabia	Arabian Medium 31'	16.10	15.95	12.30	16.92	15.81	27.20	27.65	12.32
Saudi Arabia	Arabian Heavy 27'	15.70	15.55	11.50	13.27	14.90	26.90	26.50	12.02
Abu Dhabi	Middle East 35'	17.15	17.20	12.70	17.92	15.50	26.15	29.31	13.26
Dubai	Emirate 32'	13.35	13.11	13.80	15.20	17.42	28.10	23.86	12.51
Qatar	Dukhan 40'	16.90	16.75	13.45	15.70	15.30	28.10	29.24	13.19
Iran	Iranian Light 34'	16.75	16.50	12.75	15.55	16.14	28.05	28.00	13.45
Iran	Iranian Heavy 31'	16.20	15.95	12.45	15.00	15.82	27.35	27.10	12.49
Iraq	Kirkuk Blend 36'	17.60	17.65	14.40	16.20	17.50	28.18	29.83	13.17
Kuwait	Kuwait Blend 31'	16.00	15.75	12.30	16.67	16.70	27.10	27.55	12.22
Neutral Zone	Khafji 28'	15.70	15.45	11.90	16.27	14.96	26.03	26.53	12.03
Algeria	Saharan Blend 44'	19.30	19.35	16.10	18.87	17.30	29.50	30.50	14.10
Nigeria	Bonny Light 37'	19.35	19.40	15.05	18.92	17.13	28.65	28.00	15.12
Nigeria	Forcados 31'	19.30	19.40	15.95	18.52	17.21	28.05	27.50	13.70
Libya	Ea Sider 37'	18.55	18.65	15.40	18.62	16.95	30.15	30.15	13.68
Indonesia	Minas 34'	17.45	17.45	15.50	17.56	16.28	28.53	29.53	13.55
Venezuela	Tia Juana Light 31'	19.07	19.07	12.27	17.62	15.10	28.05	29.84	13.54
Venezuela	Bachaquero 24'	16.87	16.87	11.45	14.26	13.44	25.85	27.03	12.39
Venezuela	Bachaquero 17'	15.00	15.00	10.00	12.20	11.95	23.10	25.50	11.38
Gabon	Mandji 30'	17.10	17.15	14.00	17.32	16.30	27.50	29.00	12.59
Ecuador	Oriente 30'	16.75	16.56	13.56	15.46	15.86	26.15	27.50	12.35
Total OPEC <sup>3</sup>	NA	17.12	17.03	13.36	16.77	16.10	27.81	28.43	13.03
Non-OPEC									
United Kingdom	Brent Blend 38'	20.10	20.05	15.80	18.00	18.25	26.00	28.65	NA
Norway	Ekofisk Blend 42'	18.90	19.10	15.85	17.60	16.86	26.61	28.50	14.20
Canada	Mixed Blend 30'	18.88	18.68	12.53	16.55	16.83	NA	NA	NA
Canada	Lloydminster 22'	15.30	15.30	9.97	15.25	14.03	NA	NA	NA
Mexico	Isthmus 33'	18.25	18.10	14.53	14.83	17.00	26.21	29.00	13.10
Mexico	Maya 22'	15.05	14.95	10.63	11.10	14.00	21.93	25.50	NA
Colombia	Cano Limon 30'	17.80	17.60	15.20	15.85	17.50	NA	NA	NA
Angola	Cabinda 32'	17.60	17.60	14.40	16.40	16.85	NA	NA	NA
Cameroon	Kala 34'	18.20	18.10	14.90	16.20	NA	NA	NA	NA
Egypt <sup>4</sup>	Suez Blend 33'	17.50	17.50	12.75	15.90	16.60	26.70	28.00	12.81
Oman	Oman 34'	16.75	16.50	13.40	17.38	15.25	27.35	29.00	13.06
Australia	Gippsland 42'	18.95	18.85	16.00	16.70	NA	NA	NA	NA
Malaysia	Tapis Blend 44'	18.45	18.45	12.40	18.40	14.15	27.25	29.85	14.30
Brunei	Seria Light 37'	18.20	18.20	13.75	18.50	14.10	28.35	29.60	14.15
U.S.S.R.	<sup>5</sup> Export Blend 32'	18.85	18.65	14.55	15.80	18.30	28.15	28.00	13.20
China	Daqing 33'	17.15	17.05	15.30	17.70	12.80	25.95	28.45	13.73
Total Non-OPEC <sup>3</sup>	NA	17.92	17.90	14.06	16.21	16.44	26.14	28.16	13.44
Total World <sup>3</sup>	NA	17.39	17.31	13.58	16.57	16.24	27.10	28.33	13.08
United States <sup>6</sup>	NA	17.53	17.48	13.41	16.10	15.32	25.64	27.95	13.38

<sup>1</sup> Estimated contract prices based on government-selling prices, netback values, or spot market quotations. All prices are f.o.b. at the foreign port of loading except where noted; 30 day payment plan except where noted. See Appendix for procedure used for calculation of world oil prices.

<sup>2</sup> An arbitrary scale expressing the gravity or density of liquid petroleum products.

<sup>3</sup> Average prices (f.o.b.) weighted by estimated export volume.

<sup>4</sup> On 60 days credit.

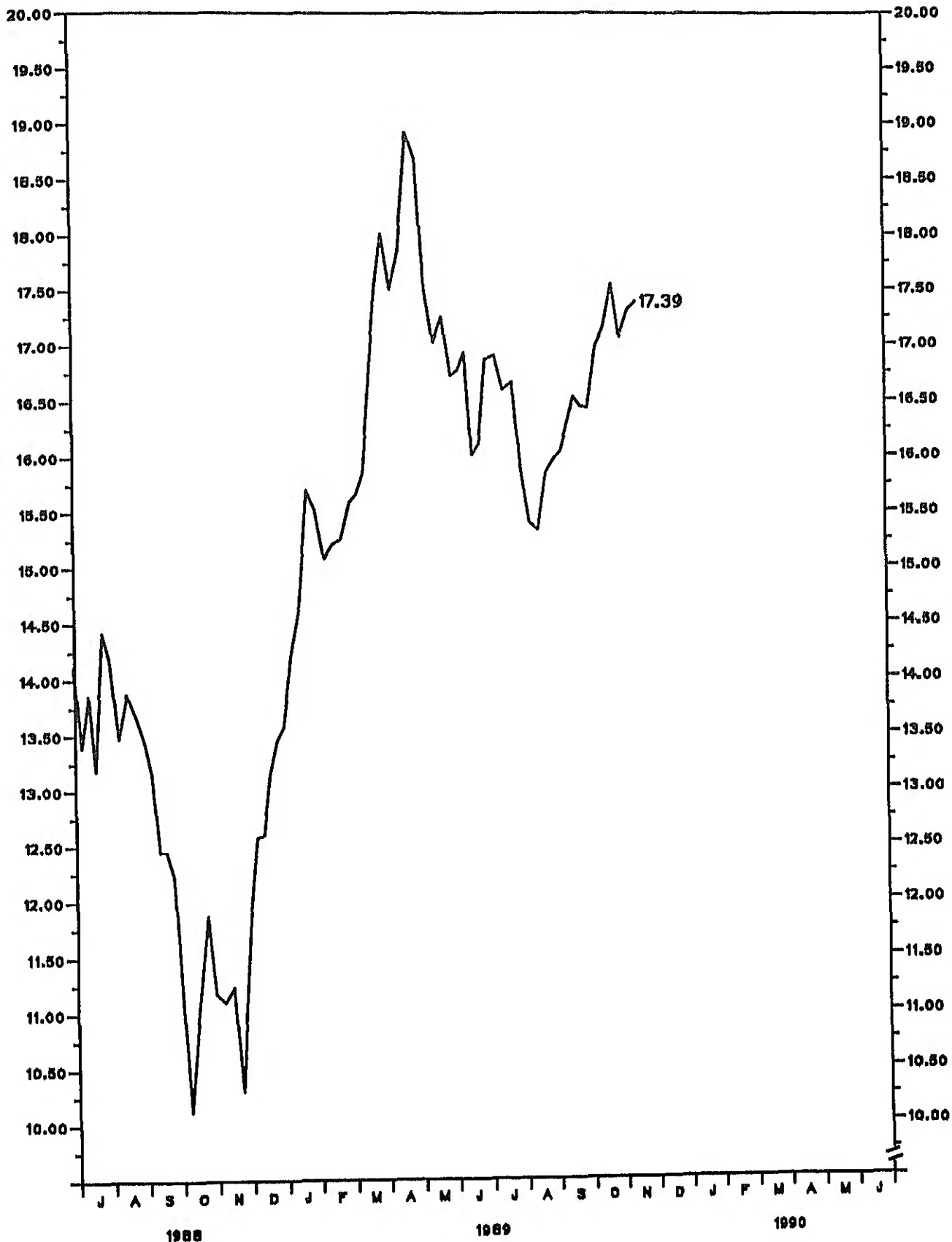
<sup>5</sup> Price (CIF) to Mediterranean destinations; also called Urals.

<sup>6</sup> Average prices (f.o.b.) weighted by estimated import volume.

NA=Not Applicable.

Source: See page 26.

Figure 9. World Crude Oil Price<sup>1</sup>  
(Dollars per Barrel)



<sup>1</sup> Average price (f.o.b.) of internationally traded oil only, weighted by estimated export volume.  
Source: See page 26.

**Table 13. Spot Market Product Prices<sup>1</sup>**  
(Dollars per Barrel)

Year/Month/Day	Motor Gasoline		Gas Oil/Heating Oil <sup>2</sup>		Residual Fuel Oil <sup>3</sup>	
	Rotterdam Loaded Premium <sup>5</sup> (98 Octane)	N.Y. <sup>4</sup> Unleaded Regular (87 Octane)	Rotterdam (0.3% Sulfur)	N.Y. <sup>4</sup> (0.2% Sulfur)	Rotterdam (1% Sulfur)	N.Y. <sup>6</sup> (1% Sulfur)
1988 Nov 18	21.69	22.16	16.65	18.10	12.91	14.00
25	21.28	20.90	17.43	19.11	12.39	14.00
Dec 2	21.63	21.42	19.30	20.79	13.89	15.10
9	20.57	19.15	19.64	20.27	13.29	14.85
16	20.40	19.11	20.24	21.46	13.74	15.00
23	20.16	19.95	20.44	22.09	14.11	15.80
30	20.52	20.06	20.71	22.20	14.49	16.50
1989 Jan 6	20.16	20.31	21.25	23.04	14.94	16.65
13	19.93	21.11	21.98	23.04	14.79	16.35
20	20.40	22.16	21.05	23.21	15.32	16.15
27	20.40	21.21	20.17	21.78	15.17	15.50
Feb 3	20.81	21.00	19.64	22.47	14.56	15.00
10	21.51	20.10	18.97	21.25	14.56	14.50
17	21.16	19.95	18.97	21.36	14.49	14.00
24	21.45	20.48	19.17	21.74	14.04	14.75
Mar 3	21.81	21.53	19.30	23.35	14.34	15.00
10	23.15	21.35	19.77	23.46	14.34	16.10
17	23.68	23.21	20.24	24.57	14.64	17.00
24	25.73	23.73	21.11	24.72	15.02	18.00
31	26.26	26.46	22.12	23.46	15.99	18.25
Apr 7	30.89	26.78	21.18	22.68	16.52	18.50
14	30.95	28.71	21.25	22.20	16.44	18.50
21	33.24	30.77	22.18	22.47	17.42	18.75
28	34.41	31.19	21.18	22.37	18.02	19.00
May 5	32.18	30.45	19.71	21.57	17.64	18.65
12	31.13	28.88	19.71	21.67	16.44	18.00
19	29.72	27.34	19.91	21.11	16.97	17.75
26	28.72	28.14	19.91	21.42	15.47	17.50
Jun 2	28.14	27.87	19.77	21.11	15.82	17.50
9	26.55	27.72	19.84	20.69	15.24	17.25
16	24.38	25.66	18.36	19.47	14.49	16.75
23	23.68	26.36	19.03	20.31	14.49	15.75
30	25.21	26.25	19.57	20.62	14.64	16.50
Jul 7	24.62	24.72	20.04	20.83	14.64	16.65
14	24.21	24.89	19.50	20.62	15.54	16.95
21	23.56	22.68	20.58	21.55	15.54	16.65
28	22.10	21.84	20.17	20.82	15.54	16.10
Aug 4	22.27	21.67	20.11	20.27	13.74	16.15
11	22.51	21.84	20.58	20.58	13.74	15.75
18	23.15	22.09	21.25	20.94	13.81	15.65
25	23.04	22.83	21.05	21.36	13.59	15.15
Sep 1	23.15	23.14	21.31	22.37	13.51	14.90
8	23.15	24.09	22.32	23.04	13.74	15.00
15	23.33	24.40	22.52	22.79	14.19	15.75
22	24.33	26.67	23.32	23.88	14.71	16.25
29	25.62	25.73	22.99	24.51	14.71	16.50
Oct 6	24.68	23.88	23.46	24.15	14.71	17.50
13	24.85	23.94	24.80	25.41	14.71	17.65
20	23.92	23.02	25.47	24.99	16.74	17.75
27	22.74	22.79	24.06	23.84	16.82	17.50
Nov 3	21.92	21.67	25.13	24.95	16.82	17.50
10	21.86	21.63	24.80	24.51	16.52	17.75

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<sup>1</sup> See Appendix for explanation of spot market product prices and coverage.

<sup>2</sup> Refers to No. 2 Heating Oil.

<sup>3</sup> Refers to No. 6 Oil.

<sup>4</sup> New York Harbor Reseller Barge Prices.

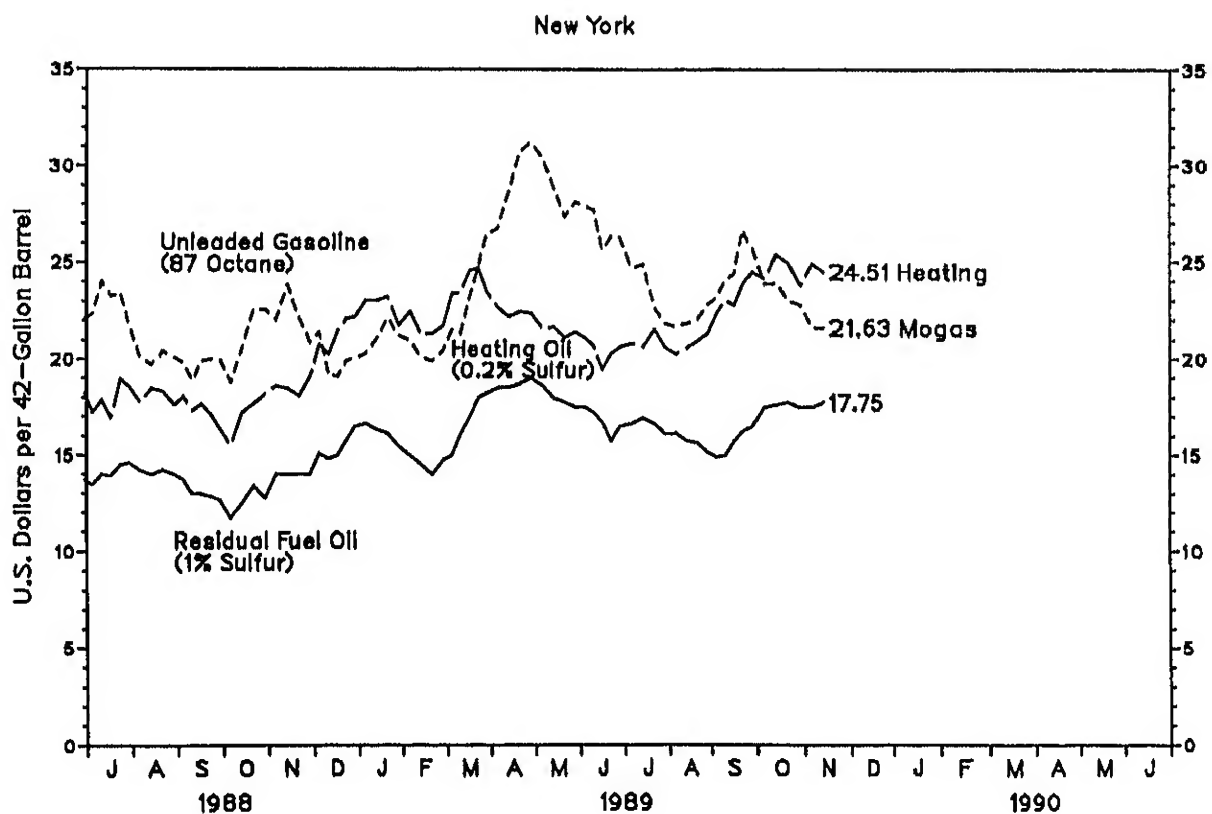
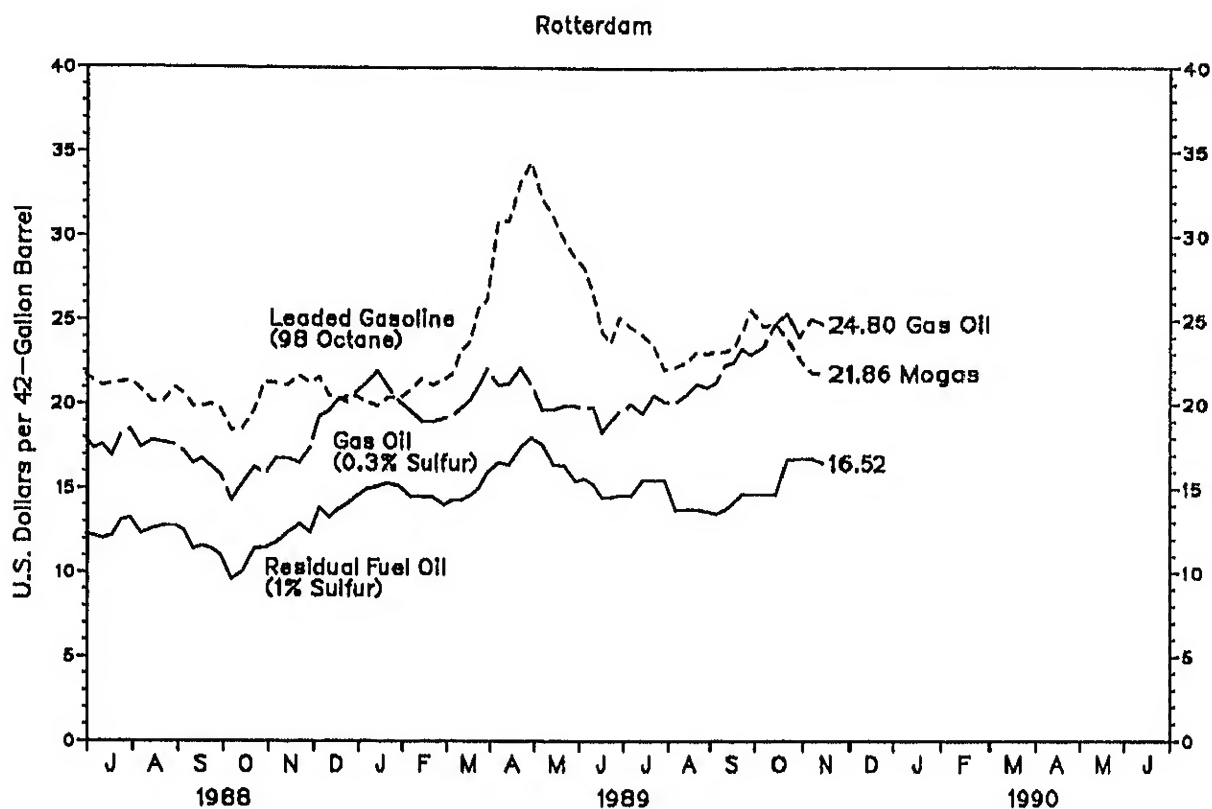
<sup>5</sup> Refers to Research Octane Number (RON) only. European premium motor gasoline of 98 octane is equivalent to a U.S. antiknock index of 93 octane.

<sup>6</sup> East Coast Cargoes.

Source: See page 26.



**Figure 10. Spot Market Product Prices**  
(Dollars per Barrel)



Source: See page 26.

**Table 14. Weekly Estimates**  
(Thousand Barrels per Day Except Where Noted)

	10/13/89	10/20/89	10/27/89	11/03/89	11/10/89
<b>Crude Oil Production</b>					
Domestic Production	7,644.0	7,644.0	7,644.0	7,601.0	7,601.0
<b>Refinery Inputs and Utilization</b>					
Crude Oil Input	13,450.0	13,222.0	13,319.0	13,277.0	13,036.0
East Coast (PADD I)	1,291.0	1,425.0	1,427.0	1,415.0	1,405.0
Midwest (PADD II)	2,729.0	2,653.0	2,544.0	2,409.0	2,553.0
Gulf Coast (PADD III)	6,366.0	6,072.0	6,238.0	6,308.0	6,095.0
Rocky Mountain (PADD IV)	470.0	411.0	441.0	455.0	496.0
West Coast (PADD V)	2,594.0	2,661.0	2,669.0	2,612.0	2,519.0
Gross Inputs	13,679.0	13,410.0	13,546.0	13,471.0	13,215.0
East Coast (PADD I)	1,295.0	1,440.0	1,465.0	1,422.0	1,412.0
Midwest (PADD II)	2,765.0	2,714.0	2,603.0	2,555.0	2,623.0
Gulf Coast (PADD III)	6,471.0	6,165.0	6,345.0	6,395.0	6,171.0
Rocky Mountain (PADD IV)	472.0	412.0	443.0	456.0	468.0
West Coast (PADD V)	2,652.0	2,685.0	2,650.0	2,642.0	2,541.0
Operable Capacity (Million Barrels per Day)	15.7	15.7	15.7	15.7	15.7
Percent Utilization	87.2	85.6	86.3	85.9	84.2
<b>Production by Product</b>					
Finished Motor Gasoline	6,995.0	6,697.0	6,763.0	6,772.0	6,763.0
Leaded Gasoline	506.0	588.0	482.0	567.0	465.0
East Coast (PADD I)	10.0	9.0	6.0	18.0	1.0
Midwest (PADD II)	124.0	130.0	97.0	132.0	102.0
Gulf Coast (PADD III)	79.0	116.0	126.0	173.0	89.0
Rocky Mountain (PADD IV)	76.0	93.0	61.0	72.0	75.0
West Coast (PADD V)	217.0	240.0	192.0	172.0	198.0
Unleaded Gasoline	6,489.0	6,109.0	6,281.0	6,205.0	6,288.0
East Coast (PADD I)	593.0	636.0	661.0	789.0	744.0
Midwest (PADD II)	1,566.0	1,358.0	1,445.0	1,340.0	1,557.0
Gulf Coast (PADD III)	3,152.0	3,039.0	2,982.0	2,902.0	2,910.0
Rocky Mountain (PADD IV)	178.0	132.0	185.0	133.0	163.0
West Coast (PADD V)	1,000.0	944.0	1,008.0	1,041.0	914.0
Jet Fuel	1,494.0	1,544.0	1,471.0	1,566.0	1,467.0
Naphtha-Type	197.0	189.0	192.0	208.0	216.0
Kerosene-Type	1,297.0	1,355.0	1,279.0	1,360.0	1,251.0
East Coast (PADD I)	68.0	94.0	84.0	84.0	76.0
Midwest (PADD II)	166.0	158.0	118.0	130.0	128.0
Gulf Coast (PADD III)	695.0	697.0	677.0	741.0	678.0
Rocky Mountain (PADD IV)	29.0	25.0	29.0	37.0	29.0
West Coast (PADD V)	339.0	381.0	371.0	368.0	340.0
Distillate Fuel Oil	2,908.0	2,714.0	2,920.0	2,999.0	2,952.0
East Coast (PADD I)	360.0	347.0	379.0	439.0	394.0
Midwest (PADD II)	688.0	615.0	651.0	662.0	701.0
Gulf Coast (PADD III)	1,284.0	1,207.0	1,347.0	1,355.0	1,299.0
Rocky Mountain (PADD IV)	133.0	124.0	115.0	140.0	139.0
West Coast (PADD V)	463.0	421.0	428.0	403.0	419.0
Residual Fuel Oil	1,000.0	953.0	1,033.0	1,071.0	1,113.0
East Coast (PADD I)	153.0	114.0	143.0	133.0	138.0
Midwest (PADD II)	54.0	82.0	57.0	86.0	63.0
Gulf Coast (PADD III)	416.0	403.0	474.0	407.0	425.0
Rocky Mountain (PADD IV)	7.0	4.0	5.0	8.0	8.0
West Coast (PADD V)	370.0	350.0	354.0	437.0	479.0
<b>Stocks (Million Barrels)</b>					
Crude Oil	344.3	337.5	342.7	340.6	346.2
East Coast (PADD I)	15.3	14.0	14.0	14.6	12.2
Midwest (PADD II)	70.7	70.6	72.9	75.4	77.5
Gulf Coast (PADD III)	165.8	160.6	161.7	163.4	163.8
Rocky Mountain (PADD IV)	11.8	11.9	12.0	11.9	11.9
West Coast (PADD V)	81.0	80.5	82.1	75.4	82.8
Kerosene-Type Jet Fuel	42.9	44.0	43.5	44.3	44.0
East Coast (PADD I)	12.3	12.3	12.3	12.3	12.1
Midwest (PADD II)	8.7	8.5	8.8	8.4	8.7
Gulf Coast (PADD III)	15.8	16.8	15.8	16.7	16.0
Rocky Mountain (PADD IV)	0.8	0.7	0.7	0.7	0.8
West Coast (PADD V)	5.3	5.6	6.0	6.2	6.5

See footnotes at end of table.

**Table 14. Weekly Estimates (continued)**  
(Thousand Barrels per Day Except Where Noted)

	10/13/89	10/20/89	10/27/89	11/03/89	11/10/89
<b>Imports</b>					
Total Crude Oil Incl SPR	6,509.0	6,607.0	6,780.0	6,492.0	6,210.0
Crude Oil	6,466.0	6,557.0	6,780.0	6,421.0	6,155.0
East Coast (PADD I)	1,496.0	1,225.0	1,418.0	1,672.0	1,298.0
Midwest (PADD II)	491.0	600.0	420.0	590.0	569.0
Gulf Coast (PADD III)	3,931.0	3,266.0	4,552.0	3,706.0	3,994.0
Rocky Mountain (PADD IV)	58.0	61.0	53.0	52.0	61.0
West Coast (PADD V)	490.0	405.0	337.0	401.0	233.0
SPR	43.0	50.0	0.0	72.0	55.0
Finished Motor Gasoline	221.0	492.0	233.0	402.0	402.0
Finished Leaded	0.0	94.0	0.0	0.0	0.0
Finished Unleaded	221.0	398.0	233.0	402.0	402.0
Blending Components	81.0	37.0	142.0	138.0	38.0
Jet Fuel	150.0	115.0	37.0	91.0	83.0
Naphtha-Type	41.0	45.0	0.0	0.0	48.0
Kerosene-Type	109.0	70.0	37.0	91.0	35.0
Distillate Fuel Oil	386.0	262.0	228.0	213.0	394.0
Residual Fuel Oil	394.0	592.0	582.0	377.0	239.0
Other	532.0	645.0	547.0	687.0	826.0
Total Refined Products Imports	1,764.0	2,143.0	1,769.0	1,908.0	1,982.0
<b>Exports</b>					
Total	E780.0	E760.0	E667.0	E917.0	E967.0
Crude Oil	E69.0	E59.0	E162.0	E162.0	E162.0
Products	E711.0	E711.0	E805.0	E805.0	E805.0
<b>Products Supplied</b>					
Finished Motor Gasoline	7,123.0	7,350.0	6,927.0	7,387.0	7,609.0
Leaded	525.0	673.0	609.0	685.0	517.0
Unleaded	6,598.0	6,677.0	6,318.0	6,702.0	7,093.0
Jet Fuel	1,480.0	1,567.0	1,575.0	1,530.0	1,525.0
Naphtha-Type	248.0	312.0	193.0	213.0	210.0
Kerosene-Type	1,232.0	1,255.0	1,382.0	1,317.0	1,315.0
Distillate Fuel Oil	3,344.0	2,925.0	3,118.0	3,040.0	2,759.0
Residual Fuel Oil	1,192.0	1,029.0	1,253.0	1,012.0	1,209.0
Other Oils	3,909.0	3,698.0	3,417.0	3,887.0	3,341.0
Total Products Supplied	17,048.0	16,569.0	16,290.0	16,856.0	16,443.0

E=Estimate based on data published for the most recent month in the *Petroleum Supply Monthly* except for crude oil production. See Appendix for explanation of estimates of crude oil production.

Note: Due to independent rounding, individual product detail may not add to total.

Source: See page 26.

**Table 15. Weather Summary**  
(Population Weighted Heating Degree-Days<sup>1</sup>)

Weather data reported in the *Weekly Petroleum Status Report* are taken directly from a computerized system implemented by the National Oceanic and Atmospheric Administration, Department of Commerce. The National Oceanic and Atmospheric Administration (NOAA)/NWS, as a U.S. Government Agency, does not endorse any consumer information services.

The weather for the Nation, as measured by population-weighted heating degree-days from July 1, 1989, through November 11, 1989, has been 10 percent warmer than last year and 2 percent cooler than normal.

**U.S. Total Heating Degree-Days (Population Weighted) and by City**

	1989-1990 This Year	1988-1989 Last Year	Normal	Percent Change	
				This Year vs. Last Year	This Year vs. Normal
July 1 - June 30		4,582	4,690	--	--
July 1 - November 11	538	598	527	-10	2
Cities					
Albuquerque	1,506	258	443	484	240
Amarillo	433	342	418	27	4
Ashville	546	684	517	+20	6
Atlanta	215	280	252	-23	-15
Billings	981	827	1,028	19	+5
Boise	787	538	806	46	-2
Boston	580	695	596	+17	+3
Buffalo	872	925	827	-6	5
Cheyenne	1,074	951	1,138	13	-8
Chicago	725	900	682	-19	6
Cincinnati	583	762	569	+23	2
Cleveland	702	876	717	-20	-2
Columbia, SC	181	305	222	+41	+18
Denver	796	683	802	20	-1
Des Moines	744	810	675	-8	10
Detroit	821	941	787	-13	4
Fargo	1,201	1,228	1,214	-2	+1
Hartford	701	911	717	-23	-2
Houston	83	10	80	****	****
Jacksonville	62	67	64	****	****
Kansas City	607	583	484	4	23
Las Vegas	136	8	151	1600	-10
Los Angeles	28	47	149	+40	-81
Memphis	206	269	265	-23	-22
Miami	2	0	0	****	****
Milwaukee	823	932	861	-12	-4
Minneapolis	947	1,073	968	-12	-2
Montgomery	205	172	174	19	18
New York	372	551	439	+32	+15
Oklahoma City	322	282	295	14	9
Omaha	715	710	645	1	11
Philadelphia	449	608	480	-26	-6
Phoenix	1	0	48	****	****
Pittsburgh	717	887	726	-19	-1
Portland, ME	936	1,325	1,045	12	-13
Providence	630	731	567	-20	-6
Raleigh	304	474	330	+36	-8
Richmond	371	529	390	-30	-5
St. Louis	413	522	480	-21	+14
Salem, OR	686	617	815	11	-16
Salt Lake City	848	467	710	38	-9
San Francisco	420	323	514	30	-18
Seattle	667	719	932	-7	+28
Shreveport	157	99	156	59	1
Washington, DC	357	494	354	+28	-1

<sup>1</sup> See Glossary.

\*\*\*\* = Normal 100 or less, or ratio in calculable.

# SOURCES

Table 1

- Monthly Data: 1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Four-Week Averages: Estimates based on EIA Weekly data.

Table 2

- Monthly Data: 1987-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*, except for operable capacity for January 1989 which is from the *Petroleum Supply Annual*, 1988.
- Four-Week Averages: Estimates based on weekly data collected on Form EIA-800.

Figure 1

- Monthly Data: 1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*, except for operable capacity for January 1989 which is from the *Petroleum Supply Annual*, 1988.
- Four-Week Averages: Estimates based on weekly data collected on Form EIA-800.

Table 3

- Monthly Data: 1987-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, -802, and -803.

Figure 2

- Data for Ranges and Seasonal Patterns: 1982-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Monthly Data: 1988, EIA, *Petroleum Supply Annual*; 1989, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, -802 and -803.

Table 4

- Monthly Data: 1987-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Figure 3

- Data for Ranges and Seasonal Patterns: 1982-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Monthly Data: 1988, EIA, *Petroleum Supply Annual*; 1989, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Table 5

- Monthly Data: 1987-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Figure 4

- Data for Ranges and Seasonal Patterns: 1982-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Monthly Data: 1988, EIA, *Petroleum Supply Annual*; 1989, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Table 6

- Monthly Data: 1987-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Figure 5

- Data for Ranges and Seasonal Patterns: 1982-1988, EIA, *Petroleum Supply Annual*; 1989, EIA, *Petroleum Supply Monthly*.
- Monthly Data: 1988, EIA, *Petroleum Supply Annual*; 1989, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Figure 6 and Table 7

- Monthly Data: 1988, 1989, EIA, *Petroleum*
- Four-Week Averages: collected on Form EIA/

Figure

Table 10

- Refiner Acquisition Cost of Crude Oil: Form EIA-14, *Refiners Monthly Cost Report*.

Table 11

- Motor Gasoline - Bureau of Labor Statistics. See glossary description for *Retail Motor Gasoline Prices*.
- Residential Heating Oil - Forms EIA-782A, *Monthly Petroleum Product Sales Report*, and EIA-782B, *Monthly No. 2 Distillate Sales Report*.

Table 12 and Figure 9

- EIA, International & Contingency Information Division.

- Platt's Oilgram Price Report.
- Petroleum Intelligence Weekly.
- Oil Buyers' Guide, International.
- Weekly Petroleum Argus.

Table 13 and Figure 10

- Oil Buyers' Guide.

Table 14

- Estimates based on weekly data collected on Forms EIA-800, -801, -802, -803, and -804.

## Appendix

# Explanatory Notes

### EIA Weekly Data: Survey Design and Estimation Methods

The Weekly Petroleum Supply Reporting System (WPSRS) comprises five surveys: the "Weekly Refinery Report" (EIA-800); the "Weekly Bulk Terminal Report" (EIA-801); the "Weekly Product Pipeline Report" (EIA-802); the "Weekly Crude Oil Stocks Report" (EIA-803); and the "Weekly Imports Report" (EIA-804). The EIA weekly reporting system, as part of the Petroleum Supply Reporting System, was designed to collect data similar to those collected monthly. In the WPSRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data are used to estimate the published weekly totals.

#### Sample Frame

The sample of companies that report weekly in the WPSRS was selected from the universe of companies that report monthly. All sampled companies report data only for facilities in the 50 States and the District of Columbia. The EIA-800 sample frame includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terminals that blend motor gasoline. The EIA-801 sample frame includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The EIA-802 sample frame includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate, and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies which transport products covered in the weekly survey are included. The EIA-803 sample frame consists of all companies which carry or store 1,000 barrels or more of crude oil. Included are gathering and trunk pipeline companies (including interstate, intrastate and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water. The EIA-804 sample frame includes all importers of record of crude oil and petroleum products into the United States.

#### Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total

sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published.

	Weekly Form	Monthly Frame Size	Weekly Sample Size
Refiners (Refineries)	EIA-800	168(255)	59(151)
Bulk Terminals	EIA-801	324	74
Product Pipelines	EIA-802	85	45
Crude Oil Stock Holders	EIA-803	172	78
Importers	EIA-804	1194	103

#### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms must file by 5:00 p.m. on the Monday following the close of the report week, 11:59 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

#### Estimation and Imputation

After the company reports have been checked and entered into the weekly data base, explicit imputation is done for companies which have not yet responded. The imputed values are an exponentially smoothed means of recent weekly reported values for this specific company. The imputed values are treated like reported values in the estimation procedure, which calculates ratio estimates of the weekly totals. First, the current week's data for a given product reported by companies in a geographic region are summed. (Call this weekly sum,  $W_s$ .) Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum,  $M_s$ .) Finally, let  $M_t$  be the sum of most recent month's data for the product as reported by all companies. Then, the current week's ratio estimate for the product for all companies,  $W_t$ , is given by:

$$W_t = \frac{M_t}{M_s} \cdot W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production. To estimate stocks of finished petroleum products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of total weekly imports is the product of the smoothed ratio and the sum of the weekly reported values and imputed values.

## Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-800, 75 percent for the EIA-801, 95 percent for the EIA-802, 80 percent for the EIA-803, and greater than 95 percent for the EIA-804. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 1 percent and 2 percent.

## Estimation of Domestic Crude Oil Production

Data on crude oil production for States are reported to the Department of Energy by State conservation agencies. Data on the volume of crude oil produced on Federally-owned offshore leases are reported by the Minerals Management Service, U.S. Department of the Interior. There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly crude oil production information becomes available. In order to present more timely crude oil production values, the Energy Information Administration prepares monthly crude oil production forecasts which are based on historical production patterns and are summed to obtain the weekly and 4-week crude oil production values shown in this publication. Cumulative crude oil production values shown in the U.S. Petroleum Balance Sheet include revised estimates published in the *Petroleum Supply Monthly*.

## Data Assessment

The principal objective of the Petroleum Supply Reporting System is to provide an accurate picture of petroleum industry activities and of the availability of petroleum products nationwide from primary distribution channels. The weekly data, which are based on sample estimates stemming largely from preliminary company data, serve as leading indicators of the monthly data. The weekly data are not expected to have the same level of accuracy as the preliminary monthly data when compared with final monthly data. However, the weekly data are expected to exhibit like trends and product flows characteristic of the preliminary and final monthly data.

To assess the accuracy of weekly statistics, monthly estimates derived from weekly estimates are compared with the final monthly aggregates published in the *Petroleum Supply Annual*. Although final monthly data are still subject to error, they have been thoroughly reviewed and edited, they reflect all revisions made during the year and they are considered to be the most data available. The mean absolute percent error measure of the average revisions relative to the final monthly data was less than 3 percent for 1988 weekly data was less than 3 percent for 19 petroleum variables analyzed. Most of the mean absolute percent errors of 3 percent or more were for refined products imports series. The mean absolute percent error for total weekly refined products imports was 15 percent for 1988. It should be noted that products imports data are highly variable and cannot be estimated from a sample with the same precision as other petroleum variables. Weekly estimates for refined products imports are almost always low because small companies, which are not in the weekly sample,

generally import large volumes of finished products only a few times during the year.

An analytical article, "Timeliness and Accuracy of Petroleum Supply Data," which assesses the differences between interim and final data on the 30 major petroleum variables, is published in the *Petroleum Supply Monthly* once each year.

## Interpretation and Derivation of Average Inventory Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, and residual fuel oil in this publication include features to assist in comparing current inventory levels with past inventory levels and with judgments of critical levels. Methods used in developing the average inventory levels and minimum operating levels are described below.

### Average Inventory Levels

The charts displaying inventory levels of crude oil and petroleum products (p.7), crude oil (p.7), motor gasoline (p.9), distillate fuel oil (p.11), and residual fuel oil (p.13) provide the reader with actual inventory data compared to an "average range" from the most recent 3-year period running from January through December or from July through June. The ranges are updated every 6 months in April and October. The 3-year period is adjusted by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variation determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors were derived using monthly data from 1982-1988.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) are deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36 months is calculated adjusting for extreme data points. The upper curve of the "average range" is defined as the average plus the seasonal factors plus the standard deviation. The lower curve is defined as the average plus the seasonal factors minus the standard deviation. Thus, the width of the "average range" is twice the standard deviation. The values of the upper and lower curves are presented in Table A1.



**Table A1. Values of Average Ranges in Inventory Graphs  
(Million Barrels)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lower Range												
Total Petroleum .....	1,027.2	1,039.7	996.6	1,002.5	1,022.8	1,027.4	1,036.4	1,056.2	1,063.0	1,076.6	1,086.0	1,041.7
Crude Oil .....	330.9	329.1	329.7	333.9	333.6	333.3	326.1	325.9	323.9	331.9	332.5	327.7
Motor Gasoline .....	237.1	235.5	224.7	222.0	222.3	220.7	222.5	219.2	224.7	219.2	223.7	223.7
Distillate Fuel Oil .....	125.9	106.4	87.8	82.4	87.3	94.9	107.6	117.4	124.8	127.9	138.6	136.7
Residual Fuel Oil .....	43.6	39.9	38.9	36.9	39.2	39.2	40.5	38.0	41.6	44.7	46.1	46.5
Upper Range												
Total Petroleum .....	1,060.8	1,073.3	1,030.2	1,036.1	1,056.4	1,060.9	1,069.9	1,089.8	1,096.6	1,110.2	1,119.6	1,075.3
Crude Oil .....	349.9	348.1	348.7	353.0	352.6	352.3	345.1	344.9	342.9	351.0	351.5	346.7
Motor Gasoline .....	247.1	245.6	234.7	232.1	232.3	230.7	232.6	229.2	234.8	229.2	233.7	233.7
Distillate Fuel Oil .....	143.0	123.6	104.9	99.6	104.5	112.0	124.8	134.6	142.0	145.1	155.7	153.8
Residual Fuel Oil .....	48.1	44.4	43.4	41.4	43.7	43.7	45.0	42.5	46.0	49.2	50.6	51.0

### Minimum Operating Inventories

The lines labeled "Minimum Operating Inventory" (MOI) on the stocks graphs for crude oil, motor gasoline, distillate fuel oil, and residual fuel oil represent estimates of those inventory levels made by the National Petroleum Council (NPC) and published in April 1989 in a report of the NPC's Committee on Petroleum Storage & Transportation. The NPC defines the MOI as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. The NPC report presents the findings of a study which was directed by the NPC Committee. MOI estimates presented in the report were developed by consensus through a decision-making process that relied on the judgement of Committee members based on their operating experience, on historical inventory trends, and on the results of an NPC survey of companies that provide primary inventory data to the Energy Information Administration. The estimated MOI values are: Crude oil -- 300 million barrels; motor gasoline -- 205 million barrels; distillate fuel oil -- 85 million barrels; and residual fuel oil -- 30 million barrels.

The NPC did not develop a minimum operating inventory level for total petroleum stocks. The line labeled "observed minimum" on the "Stocks of Crude Oil and Petroleum Products, U.S. Total" graph is the lowest inventory level observed during the most recent 36-month period as published in the *Petroleum Supply Monthly*.

### Projections from the Short-Term Energy Outlook, October 1989

One of the most uncertain factors affecting the domestic short-term energy outlook is the world oil price, defined here as the nominal price of imported crude oil delivered to U.S. refiners. Because of this uncertainty, three different world oil price scenarios are employed. These scenarios are used to develop a base case projection and two alternative projections for domestic supply and demand. In this *Outlook*, a relatively high probability is assigned to the low price scenario.

### Base Case

In the base oil price scenario, the world oil price decreases from \$17.60 in the third quarter of 1989 to \$17.50 in the fourth quarter of 1989 and throughout 1990. This scenario is based on the assumption that OPEC will be able to agree at the November Ministerial Conference on a new set of crude oil production quotas that will restrain total OPEC crude oil production (1) to about 21.0 million barrels per day in the first half of 1990 and (2) to an annual average rate of about 21.7 million barrels per day for 1990.

### Alternative Cases

#### Low Demand

In the low price scenario, the world oil price decreases to \$15 per barrel in the fourth quarter of 1989 and remains at that level throughout the forecast period. In this scenario, it is assumed that the competition for market share between the Persian Gulf members of OPEC will intensify and lead to higher OPEC oil production than in the base scenario. Revenue concerns, however, hold overproduction below levels that would trigger a price collapse.

#### High Demand

In the high oil price scenario, the world oil price increases to \$20 per barrel in the fourth quarter of 1989 and remains at that level throughout the forecast period. In this scenario, it is assumed that economic growth and oil consumption growth will remain strong in late 1989 and in 1990, and that OPEC will reach a solid production accord that will sharply reduce the incentive for Persian Gulf member nations to engage in overproduction.

For more detailed information on the forecast, please refer to the published report, October, 1989 *Short-Term Energy Outlook*. Copies of the report are available from:

National Energy Information Center  
Room 1F-048, Forrestal Building  
1000 Independence Avenue, S.W.  
Washington, DC 20585  
Telephone (202) 586-8800

## Calculation of World Oil Price

The weighted average international price of oil, shown in the "Highlights" on page 1 and on page 18, is an average calculated using specific crude oil prices weighted by the estimated crude oil export volume for each oil-producing country. To develop the table shown on page 18, a list of major oil producing/exporting countries was chosen. For each country, the contract selling price of one or more representative crude oils was determined by investigating a number of industry publications (i.e., "Oil Buyers' Guide", "Platt's Oilgram Price Report", "Petroleum Intelligence Weekly", and "Weekly Petroleum Argus") and by contacting oil market analysts.

Then, the appropriate crude oil volumes to be used as weighting factors for each country were determined. These volumes are estimates based on a number of sources which provide data on production, consumption, and exports for these countries. Export volumes for a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors. After the export volumes had been determined, simple mathematical weighted averages were calculated to arrive at the "Total OPEC," "Total Non-OPEC," and "Total World" prices.

The average United States (FOB) import price is derived by the same basic procedure as the world oil price, that is, taking the representative contract crude oil price of a specific crude oil from a particular country and weighting this price by a certain volume of crude oil. In this case, the weighting factors are the volumes of crude oil imported into the U.S. from pertinent countries. Import volumes from a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors.

Both the import and export volumes are preliminary. Due to their origin, these estimates cannot be fully verified. These volumes are updated monthly, or more frequently when changes in oil market conditions make updating appropriate.

## Explanation and Coverage of Spot Market Product Prices

Definition of spot market product prices for the Rotterdam market: Represent the mid point of the bid/asked price range for CIF cargoes scheduled for prompt arrival at Rotterdam (within 48 hours).

Definition of spot market product prices for the New York market: Represent last sale price reported or offered. Prices are ex-duty and do not include Federal or State taxes.

General definition of spot prices: A transaction concluded "on the spot," that is, on a one-time prompt delivery basis, usually referring to a transaction involving only one cargo of product. This contrasts with a term contract sale which obligates the seller to furnish product on an evenly-spread delivery basis over an extended period of time, usually for 1 year.

Coverage of petroleum product prices is restricted to and updated according to the major products traded. Major products are determined by the highest number of transactions and the highest volumes of product traded, e.g., 1987 replacement of the New York leaded regular gasoline series with the unleaded regular gasoline series.

## Glossary

**Barrel.** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons.

**CIF (Cost, Insurance, Freight).** This term refers to a type of sale in which the buyer of the product agrees to pay a unit price that includes the f.o.b. value of the product at the point of origin plus all costs of insurance and transportation. This type of a transaction differs from a "Delivered" purchase, in that the buyer accepts the quantity as determined at the loading port (as certified by the Bill of Lading and Quality Report) rather than pay based on the quantity and quality ascertained at the unloading port. It is similar to the terms of an f.o.b. sale, except that the seller, as a service for which he is compensated, arranges for transportation and insurance.

**Cooling Degree-Days.** The number of degrees per day the daily average temperature is above 65 degrees F. The daily average temperature is the mean of the maximum and minimum temperature for a 24-hour period.

**Crude Oil.** A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Lease condensate and drips are included but topped crude oil (residual) and other unfinished oils are excluded.

**Crude Oil Input.** The total crude oil put into processing units at refineries.

**Degree-Day Normals.** Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1951-1980). These may be simple degree-day normals or population-weighted degree-day normals.

**Distillate Fuel Oil.** Includes No. 1, No. 2, and No. 4 fuel oils, and No. 1, No. 2, and No. 4 diesel fuels. These are light fuel oils used primarily for home heating, as a diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and for electric power generation.

**FOB (Free On Board).** Pertains to a transaction whereby the seller makes the product available within an agreed-on period at a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

**Gas Oil.** European designation for No.2 heating oil, and diesel fuel.

**Gross Inputs.** The crude oil, unfinished oils, and natural gas plant liquids put into atmospheric crude oil distillation units.

**Heating Degree-Days.** The number of degrees per day the daily average temperature is below 65 degrees F. The daily average temperature is the mean of the maximum and minimum temperature for a 24-hour period.

**Imports.** Unless otherwise specified in this report, refers to gross imports. Imports of minor products ("other oils") include aviation gasoline, kerosene, unfinished oils, liquefied petroleum gases, plant condensate, petrochemical feedstocks, lube oils, waxes, special naphthas, coke, asphalt, and other miscellaneous oils.

**Jet Fuel.** Includes kerosene-type jet fuel and naphtha-type jet fuel. Kerosene-type jet fuel is a kerosene quality product used primarily for commercial turbojet and turboprop aircraft engines. Naphtha-type jet fuel is a product in the heavy naphthas range used primarily for military turbojet and turboprop aircraft engines.

**Liquefied Refinery Gases (LRG).** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane. Excludes still gas.

**Motor Gasoline.** Finished leaded gasoline, finished unleaded gasoline, and blending components in the gasoline range. Production data represent finished leaded gasoline and finished unleaded gasoline. Stocks and imports data consist of the two types of finished gasoline and blending components. Stock change used in the calculation of motor gasoline product supplied is the change in finished motor gasoline stocks.

**Operable Capacity.** The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

**Petroleum Administration for Defense Districts (PADD).** Five geographical areas into which the nation was divided by the Petroleum Administration for Defense for purposes of administration. These PADDs include the States listed below:

**PADD I:** Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia.

**PADD II:** Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, and Wisconsin.

**PADD III:** Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas.

**PADD IV:** Colorado, Idaho, Montana, Utah, and Wyoming.

**PADD V:** Alaska, Arizona, California, Hawaii, Nevada, Oregon, Washington.

**Population-Weighted Degree-Days.** Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree days, each State is divided into from one to nine climatically homogeneous divisions which are assigned weights based on the ratio of the population of the division to the total population of the State. Degree-day readings for each division are multiplied by the corresponding population weight for each division and these products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions comprised of from three to eight States which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and these products are then summed to arrive at the national population weighted degree-day figure.

**Processing Gain.** The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

**Products Supplied.** A value calculated for specific products which is equal to domestic production plus net imports (imports less exports), less the net increase in primary stocks. Total products supplied is calculated as inputs to refineries, plus estimated refinery gains, plus other hydrocarbon input, plus product imports, less product exports, less the net increase in product stocks. Values shown for "Other Oils" product supplied are the difference between total product supplied and product supplied values for specified products. Other oils product supplied incorporates crude oil product supplied and reclassified product adjustment.

**Refiner Acquisition Cost of Crude Oil.** The average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC 1131. Imported crude oil is any crude oil which is not domestic oil. The composite is the weighted average price of domestic and imported crude oil. Prices do not include the price of crude oil for the SPR.

**Capacity Utilization.** Ratio of the total amount of shed oils, and natural gas plant liquids run  
1 distillation units to the operable capacity of  
2 period 1979-1984 the refinery capacity  
3 .S. refineries ranged between 87 percent and  
4 for an individual refinery may fluctuate  
5 n the type of crude and other raw  
6 types of products produced, and the  
7 refinery.

to. 5 and No. 6 fuel oils which are  
or electric power generation, for

industrial and commercial space heating, as a ship fuel, and for various industrial uses.

**Retail Motor Gasoline Prices.** Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). These prices are collected in 85 urban areas selected to represent all urban consumers -- about 80 percent percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service).

**Stock Change (Refined Products).** Component of Product Supplied calculation shown on U.S. Petroleum Balance. The product stock change shown on the U.S. Petroleum Balance Sheet for the current 4-week period is calculated in the following way; an average daily stock change is calculated for major refined products (i.e., all actual reported stocks); this stock change is added to an estimate for minor product stock change based on historical monthly data; a daily average stock change for refined product stocks for the 4-week period is then calculated. To calculate minor product stock change, the stock levels shown for other oils in the stock section of the balance sheet are used. These other oils stock levels are derived by: 1) computing an average daily rate of stock change for each month based on monthly data for the past 6 years; 2) using this daily rate and the minor stock levels from the most recent monthly publication to estimate the minor product stock level for the current period.

**Stocks.** For individual products in the WPSR, quantities held at refineries, in pipelines, and at bulk terminals which have a capacity of 50,000 barrels or more, and in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but included in "Other Oils" estimates and "Total."

**Unaccounted-for Crude Oil.** A term which appears in U.S. Petroleum Balance Sheet. It reconciles the difference between data (or estimates) about supply and data (or estimates) about disposition. Its value can be positive or negative since it is a balancing term. As it appears in the monthly publications, it reflects the accuracy of the reported data. Because the unaccounted-for crude oil figure reflects the accuracy of reported and estimated figures, one would expect the figure to be larger in balances using preliminary or estimated data and smaller in balances using final data. In fact, the published figures confirm this expectation. In the WPSR, 4-week averages for the previous year are interpolated from final monthly data, so that the unaccounted-for crude oil value for the previous year is considerably smaller than that for the current period.

**United States.** For the purpose of the report, the 50 States and the District of Columbia. Data for the Virgin Islands, Puerto Rico, and other U.S. territories are not included in the U.S. Totals.

**Energy Information Administration  
Electronic Publication System (EPUB)  
User Instructions**

Selected *Weekly Petroleum Status Report (WPSR)*, *Petroleum Supply Monthly (PSM)*, *Weekly Coal Production (WCP)*, *Electric Power Monthly (EPM)*, *Natural Gas Monthly (NGM)*, and *Quarterly Coal Report (QCR)* statistics are now available electronically on the Energy Information Administration (EIA) Computer Facility. Public access to these machine readable statistics is possible by dialing (202) 586-8658 for 300 baud or 1200 baud line speeds. Communications are Asynchronous and require a standard ASCII-type terminal. There is no charge for this service. Although no password is required, you will be requested to use your telephone number as a user identifier. This service is available 7 days per week (8:00 a.m. - 11:00 p.m., Monday thru Friday, and 10:00 a.m. - 6:00 p.m., weekends and holidays). Weekly petroleum and coal statistics are updated on Wednesday (Thursday in the event of a Holiday) after 5:00 p.m. Monthly petroleum supply data for the current available month are also provided and are updated by 5:00 p.m. on or about the 24th of the month. Monthly statistics from the *Electric Power Monthly* are available on or about the first working day of each month. Monthly statistics on natural gas are available on or about the 20th of the month. Questions or comments on petroleum data should be directed to Dale Bodzer at (202) 586-1257. Questions or comments on coal data should be directed to Noel Balthasar at (202) 586-5252. Questions on electricity data should be directed to Deborah Bolden at (202) 586-6872. Questions or comments on natural gas data should be directed to Jim Todaro at (202) 586-6305.

**Access Instructions:**

- 1) DIAL (202) 586-8658
- 2) HIT RETURN (CARRIAGE RETURN) TWO OR THREE TIMES UNTIL THE EPUB BANNER APPEARS

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- 3) SELECT THE STATISTICS YOU WISH FROM THE MENU

THE FOLLOWING REPORTS ARE AVAILABLE.

WPSR — WEEKLY PETROLEUM STATUS REPORT	CWWR — WEEKLY COAL WORK TABLE
PSMR — PETROLEUM SUPPLY MONTHLY	QMCR — QCR METRIC TABLE
STKS — PSM STATE STOCKS TABLE	QSCR — QCR SHORT TONS TABLE
WCPR — WEEKLY COAL PRODUCTION REPORT	MQWR — QCR METRIC WORK TABLE
EPMS — U.S. ELECTRIC POWER STATISTICS	SQWR — QCR SHORT TONS WORK TABLE
NGMR — NATURAL GAS MONTHLY REPORT	: : : — NOTE: QCR = QUARTERLY COAL RPT

PLEASE ENTER THE DESIRED REPORT ID... WPSR

- 4) ENTER YOUR 10 DIGIT PHONE NUMBER

\$WP1081 LOGON IN PROGRESS AT 13:23:22 ON JANUARY 12, 1989  
PLEASE ENTER YOUR PHONE NUMBER...

- 5) YOU WILL THEN SEE A BANNER WHICH SHOWS THE REPORT YOU HAVE SELECTED  
ALLOW AMPLE TIME TO GET READY TO RECEIVE OUTPUT

YOU HAVE SELECTED WEEKLY STATISTICS FROM THE WEEKLY PETROLEUM REPORTING SYSTEM. THIS SYSTEM WILL DISPLAY THE LATEST U.S. PETROLEUM BALANCE SHEET AND THE MOST RECENT 5 WEEKS OF WEEKLY PETROLEUM STATUS REPORT DATA. PLEASE TURN ON YOUR PRINTER NOW IF YOU WISH TO OBTAIN HARD COPY OUTPUT.

(PRINTING WILL BEGIN IN 20 SECONDS)

Note: Users who experience problems when first attempting to logon should check their terminal switch settings for the following:

- 7 Data Bits
- 1 Stop Bit
- Even Parity



